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THE CHOLERA SITUATION.

Italy.—Cagliari has been declared free from cholera pursuant to the terms of the international sanitary convention of Paris. This leaves Italy again free from the disease, Cagliari in Sardinia being the only place in Italy in which cholera has been reported since last winter.

Japan.—The number of cases of cholera being reported in Japan is markedly decreasing. The number of infected localities has also diminished. The total number of cases reported to the present time is approximately 2,000. There has been no extensive outbreak at any one place. Of interest as showing one of the ways in which the disease has been spread is the reported finding of 9 cholera bacillus carriers among 3,500 contacts examined.

Turkey in Europe.—On November 19 there were reported in Constantinople 21 new cases of and 12 deaths due to cholera, in addition to 23 cases and 4 deaths among refugees in the city. There were in all 194 cases under treatment November 19. Since November 5, 312 cases, with 110 deaths, had been reported. Cholera is reported in the Turkish Army defending Constantinople and is believed to be present also in the investing Bulgarian Army.

PUBLIC HEALTH LEGISLATION.

The publication of the sanitary legislation being currently enacted by cities of the United States was begun in the issue of the Public Health Reports of March 24, 1911, and has been carried on continuously since that time. With the municipal ordinances there have been included sanitary rules and regulations which having been promulgated pursuant to law or ordinance have the force of law. The city ordinances and regulations adopted from January 1, 1910, to June 30, 1911, have been reprinted in a separate volume, rearranged under subjects with a table of contents and index in sufficient detail for purposes of easy reference. From time to time similar reprints will be made.

The publication of the ordinances and regulations in the weekly issues of the Public Health Reports makes currently available to health officers and other sanitarians the sanitary measures and practices being currently adopted in municipal health work. The reprinting of them, rearranged under subjects and in volumes containing the measures adopted during a given period of time, will be of added value

for reference and study. For any period the laws and regulations adopted will show the status and trend of municipal sanitary thought and practice.

Beginning with this issue, State and Territorial laws and regulations pertaining to public health will also be published in the Public Health Reports. This will make readily available to health officers and other sanitarians current State legislation and will show the measures being adopted and the progress made by the several Commonwealths. The publication of the State laws will serve the same useful purpose as that of the city ordinances but will be of broader scope. The laws and regulations will be published as soon after enactment or promulgation as copies can be secured from the several State authorities upon whose cooperation, naturally, much will depend.

SMALLPOX IN THE UNITED STATES.

In this issue will be found a detailed statement of the prevalence of smallpox in 31 States and the District of Columbia during the second quarter of the current calendar year. In these States there was a total of 5,735 cases, with 53 deaths, reported during the three months, April, May, and June. Thirty-three of the deaths occurred in Texas, leaving 20 distributed among the other 30 States. In Texas there were outbreaks of the virulent form of smallpox, which accounts for the relatively large number of deaths in that State. In St. Joseph County, Ind., there appears also to have been a small outbreak of the severe type of the disease. Elsewhere the smallpox was of the benign type that has been generally prevalent throughout the country for a number of years. In the 31 States, exclusive of Texas, the average fatality rate was 1 death in 280 cases.

The presence of smallpox during the period under consideration was not limited to the 31 States referred to. The disease was also present in the other States, but there is no means of ascertaining the number of cases that occurred.

OUTBREAK OF GASTRO-ENTERITIS AND TYPHOID FEVER DUE TO DRINKING WATER ON EXCURSION STEAMER.

A REPORT OF AN INVESTIGATION OF AN OUTBREAK OF GASTRO-ENTERITIS AND TYPHOID FEVER AT CLINTON, IOWA, AND OTHER TOWNS ALONG THE MISSISSIPPI RIVER AMONG EXCURSIONISTS WHO HAD BEEN ON A RIVER STEAMER JULY 29 AND 30.

By L. L. LUMSDEN, Surgeon, United States Public Health Service.

Pursuant to bureau instructions, an investigation was made of the outbreak of gastro-intestinal disturbance (vomiting and diarrhea) and typhoid fever which occurred in July and August of this year in Clinton, Iowa, and other towns along the Mississippi River.

Dr. H. R. Sugg, health officer of Clinton, Iowa, had collected, before my arrival, extensive data about the outbreak in Clinton and had ascertained that a number of other towns were affected simultaneously with Clinton. He placed the data which he had collected

at my disposal and rendered me very material assistance in the collection of further data.

The request for the investigation was made by the health officer of Clinton and was approved by the Iowa State Board of Health. The investigation was begun on October 4 and terminated on October 11. Clinton, Lyons, Camanche, Sabula, and Davenport in Iowa; Albany, Savanna, and Quincy in Illinois, and St. Louis in Missouri were visited.

Dr. Sugg's findings furnished strong evidence that the infection responsible for the outbreak was contracted in the course of an excursion trip made on the steamer *G. W. Hill* on July 29.

From Clinton (including Lyons) about 1,200 persons went on the excursion. Of these persons the writer estimates, from the data collected by Dr. Sugg and himself, at least 600 (or 50 per cent) became ill between 12 and 72 hours after their return from the trip. The illness was manifested usually by nausea and vomiting, diarrhea, and prostration. Diarrhea was the most constant symptom. The majority of the cases had nausea and vomiting along with the diarrhea. A few had nausea and vomiting without diarrhea. A small proportion had fever during the diarrheal attack. Some had rather severe abdominal pain. In the majority of cases the duration of the gastro-intestinal disturbance was from 3 to 5 days. In some cases the attack continued for only about 24 hours and in others for several weeks. In some of the cases there were recurrences at intervals of 3 or 4 days. The symptoms presented in the attacks were similar to those which have been presented in a number of outbreaks of diarrhea (sometimes referred to as outbreaks of "winter cholera") resulting from the use of water supplies polluted with sewage. Striking examples were furnished by the outbreak in Mankato, Minn., in 1908,¹ and the one in Rockford, Ill., in 1912.²

Among the residents of Clinton who did not go on the excursion trip on the steamer *G. W. Hill* on July 29 there was during the summer of 1912 no unusual occurrence of diarrheal disease.

At a meeting of the Clinton County Medical Society on October 4, attended by about 30 practicing physicians, the writer asked those present about outbreaks of diarrhea in their practices during the summer. A number reported the occurrence of such outbreaks among members of families who went on the excursion, but none reported such outbreaks among members of families who did not go on the excursion.

The writer canvassed in Clinton about 50 households, some of whose members went on the excursion. The outbreak was sharply confined to those who went on the excursion. In a number of instances every member of a family who made the trip was attacked and every member of the family who did not go on the excursion was exempt.

THE EXCURSIONS OF JULY 29 AND 30.

From the data collected in Clinton it was clear that the outbreak was not caused by a distribution of infection in Clinton, but was caused by infection contracted from some source in the course of the

¹ Bracken, Bass, Westbrook, Whittaker, and Hill: The Mankato Typhoid Fever Epidemic of 1908. *Journ. Infectious Diseases*, vol. 9, No. 3, Nov., 1911, p. 410.

² Jordan: The Rockford (Ill.) Typhoid Epidemic. *Journ. Infec. Diseases*, vol. 11, No. 1, July, 1912, p. 21.

excursion on the steamer *G. W. Hill* on July 29. Therefore the investigation was extended to determine if persons who went on the excursion from other towns along the Mississippi River also were affected. The excursion of the steamer *G. W. Hill* on July 29 was as follows: Left Lyons (now a part of the corporation of Clinton), Iowa, about 8.30 a. m.; first stop at Clinton; next at Camanche, Iowa; next at Albany, Ill.; and arrived at Davenport, Iowa, about 1 p. m.; remained at Davenport until about 4.30 p. m., and then made return trip, stopping at same towns which were stopped at on the trip down the river that morning, and arrived at Lyons about 11 p. m. This excursion was under the auspices of the First Congregational Church of Clinton. From Lyons there were about 450 passengers, from Clinton about 900, from Camanche 123, and from Albany 86—a total of about 1,550. This was an unusually large number of persons to go on the steamer at one time. The day was said to have been very warm and the demand among the passengers for ice water large.

On the following day the steamer *G. W. Hill* made an excursion trip from Sabula, Iowa, via Savanna, Ill., Bellevue, Iowa, and Sand Prairie, Ill., to Dubuque, Iowa, and return. This excursion was made under the auspices of the Presbyterian Church in Savanna. There were from Sabula 63 passengers, from Savanna about 250, from Bellevue 124, and from Sand Prairie 33. Of the passengers who went aboard at Savanna about 150 were people who lived in Savanna and the remainder came from Freeport, Shannon, Mount Carroll, and the surrounding country in Illinois. Most of those who went aboard at Sand Prairie were from Hanover, Ill.

On both of the excursions—that of July 29 and that of July 30—the bulk of the food consumed by the excursionists was furnished from lunch baskets prepared in many different homes and taken along by the members of the same family or small groups of friends for their exclusive use. Some parties took cold tea or water from their homes for use as a beverage while on the trip. On board the steamer sandwiches, ice cream, and soft drinks, such as lemonade, soda water, ginger ale, etc., were offered for sale and sold to the excursionists from stands owned and furnished by the steamship people.

While at Davenport many of the excursionists of July 29 ate and drank at different hotels, restaurants, lunch rooms, and private homes in that city; but so far as could be ascertained no large proportion ate or drank at any one place while there. On both excursions the water furnished the excursionists for drinking purposes was obtained, the steamship officials state, from the Mississippi River while the steamer was underway. Ice was placed in the water in the tanks on board and the steamship officials state that all of the ice used on board on July 29 and until Dubuque was reached on July 30 was obtained from a dealer in Lyons. That dealer states that the ice he furnished the steamer on July 29 was "pure channel ice, the same we have been supplying our customers with all season."

OUTBREAKS OF DIARRHEA AND TYPHOID FEVER AMONG EXCURSIONISTS.

Upon investigating the situation in all the towns from which persons went on the excursion of July 29, it was found that the excursionists who went from Camanche and Albany were affected in the same way and in about the same proportion as were those who went from Clinton and Lyons. In each of the towns persons who did not

go on the excursion were not affected, while among those who went at least 50 per cent had the diarrheal attack and some developed typhoid fever. Among the persons who went on this excursion four cases of illness terminated in death—one from the gastro-intestinal attack and three from typhoid fever. Between July 29 and September 5 there developed among the excursionists definitely diagnosed cases of typhoid fever, which were learned of in the course of the investigation, as follows:

Eight among those who went from Clinton or Lyons, two among those who went from Camanche, and one among those who went from Albany. It is quite probable that more cases of typhoid fever than were learned of by the investigators developed among the excursionists, because typhoid fever is not a reportable disease in either Iowa or Illinois. During the period from July 29 to September 5 there developed, so far as could be ascertained, among the residents of Clinton (including Lyons), with a population of about 27,000, of Camanche, with a population of about 800, and of Albany, with a population of about 800, no cases of typhoid fever other than those which developed among the persons (about 1,550 all told) who went on the excursion on July 29. Thus the 1,550 persons who went on the excursion living in widely scattered areas in three different towns furnished about 800 cases of a severe and acute diarrhea, and at least 11 cases of typhoid fever, while some 29,000 persons living in these same towns and exposed to the same general conditions in the towns as were those who went on the excursion were not affected. This fact alone shows beyond doubt that something happened on the excursion which was responsible for the sickness.

Upon investigating the situation at Sabula, it was found that the persons who went from there on the excursion to Dubuque on July 30 were affected in the same way, but in somewhat smaller proportion than were the persons in Clinton (Lyons), Camanche, and Albany, who went on the excursion on the same steamer (the *G. W. Hill*) the day before.

Of the persons who went from Subula on the Dubuque excursion about 15 had the diarrheal attack within the 72 hours following, and two developed typhoid fever within the 3 weeks following. Besides these two cases of typhoid fever there was only one other case in the town during the summer and that case was in a person who came home sick after an absence of some months in a railroad camp in Illinois. Among the residents of Sabula who did not go on the excursion there was, during the summer, no outbreak of diarrhea.

From Sabula the writer went across the river to Savanna, Ill., fully expecting to find that the persons who went on the Dubuque excursion from Savanna had been affected as had those who went from Sabula. He was surprised to find that such was not the case. The health officer, all of the practicing physicians, and a number of citizens—including the business manager of the Dubuque excursion—in Savanna were interviewed, but there was no history of an outbreak of diarrhea or typhoid fever in July or August either among the residents who did go on the excursion or among those who did not go. Upon further investigation the writer ascertained that there was no outbreak of illness among those who went on the Dubuque excursion from Bellevue, Hanover, Mount Carroll, or Freeport. From this important fact it appeared that on the morning of July 30, either when the steamer was going across the river from Sabula to Savanna, or at

some other time between the time on which some of the excursionists got aboard at Sabula and the time of the departure of the steamer from Savanna, something occurred which prevented the persons who embarked at Savanna and the subsequent ports from being exposed to the infection to which the persons who were on the vessel the day before, and to which some of the persons who embarked at Sabula that morning, were exposed.

The dates of definite onset of illness with symptoms of the cases of typhoid fever which developed among the excursionists of July 29 and 30 were as follows:

Date:	Number of cases.
Aug. 5.....	1
Aug. 10.....	1
Aug. 12.....	2
Aug. 13.....	1
Aug. 14.....	2
Aug. 17.....	1
Aug. 18.....	2
Aug. 24.....	1
Sept. 4.....	1
Sept. 5.....	1
Total.....	13

The case with onset on August 5 had a diarrheal attack beginning July 31 which continued until fever was noticed on August 5. If the definite onset of typhoid in this case was August 5 the incubation period (seven days), presuming infection was contracted on July 29, was somewhat shorter than the average incubation period for typhoid fever.

Presuming that infection was contracted on July 29 in the cases developing definite symptoms of typhoid on September 4 and 5, the incubation period in these cases was unusually long; but in both these cases the diarrheal attack began the day after the excursion and continued for about one week. Following the diarrheal attack both cases suffered from headache, lassitude, and digestive disturbance until the definite onset of typhoid symptoms.

It is quite probable, in view of all the evidence, that in all three of the cases presenting unusual incubation periods for typhoid the infection came from the same source as that for all, or the majority, of the other 10 cases.

EPIDEMIOLOGICAL FINDINGS.

The writer personally interviewed in the different towns about 75 families, some members of which went on either the excursion of July 29 or that of July 30. There was a striking similarity in the histories obtained. The following histories are presented as types:

(1) Family of J. E. D. Address, Clinton, Iowa. Number in household, 7. Went on excursion, 7. Number had diarrheal attack, 7. Number drank water from tank on steamer, 7. Number ate or drank things not taken from home, 5 ate ice cream bought on steamer, 3 ate dinner at a private home in Davenport. *Remarks.*—Mr. D. and oldest daughter drank much less water on the steamer than the other members of the family did, and their diarrheal attacks were of shorter duration and milder than were those of the others. All noticed that the drinking water on steamer was decidedly turbid.

(2) Family of C. L. P. Address, Camanche, Iowa. Four in family. Two, mother and daughter, went on excursion. Both had diarrheal attacks. Others remained well. Onset of one, July 30; of other, July 31. Duration of illness, about 1 week.

Both drank water from tank on steamer. Daughter ate ice cream on steamer; except for this and water on steamer, neither ate or drank anything not taken from home. Both noticed drinking water on steamer was turbid—particularly on return trip.

(3) Family of W. H. Address, Albany, Ill. Number in family, 5. Went on excursion, 3. Had diarrheal attack, 2 out of the 3 who went on excursion. Drank water from tank on steamer, 3. Besides water on steamer, 2 ate or drank things not taken from home. Of these 1 had diarrheal attack, other did not.

(4) Family of K. F., Albany, Ill. Four in family. All 4 went on excursion. Two had diarrheal attack. These 2 drank water on steamer, other 2 did not.

(5) Family of F. V. C., Clinton, Iowa. Six in household. Five, mother and 4 children, went on excursion. Four, mother and 3 children, had diarrheal attack. Onsets between July 30 and October 2. Duration of attacks 2 to 10 days. All 5 drank water from tank on steamer. Besides water on steamer none ate or drank anything not taken from home.

A number of persons who went on the excursion but did not drink any water on the steamer did not get sick. All who were interviewed who went on the excursion of July 29 and who afterwards had the diarrheal attack gave a history of drinking water during the return trip from the tank on the upper deck of the steamer.

So far as could be ascertained, none of the considerable number of persons who made the trip to Davenport, but not the return trip, on the steamer *G. W. Hill* had the diarrheal attack; nor did any who on the return trip did not drink water from the tank on the upper deck have the diarrheal attack.

A number of persons who went on the excursion and afterwards remained well gave a history of not drinking any water while aboard the steamer except that from a barrel near the engines on one of the lower decks. Several interviewed stated that the water in this barrel was much clearer than that furnished from the tank on the upper deck. A number of the excursionists stated that they noticed the water from the tank on the upper deck was much more turbid just as the steamer left Davenport than it was on the trip down. The steamship officials stated that the master and the crew of the steamer had rigid instructions not to pump water into the drinking-water tanks except when the vessel was in the channel, and that they had no reason to believe that their instructions were disobeyed on July 29.

A young man among the excursionists stated that about a half hour before the steamer left the beach at Davenport he was seated against the water tank on the upper deck, and certainly heard water running into the tank, and that one of the deck hands, after the tank presumably had become filled, got up on the tank and closed the valve in the pipe leading into the tank. A young lady who was seated on the top of the tank at the time stated that she remembered getting down to let the deck hand get at the valve.

While at Davenport the steamer lay at a beach landing at the foot of Brady Street, just upstream from the ferry landing. Upstream from and within 500 yards of where the steamer lay several of the city's sewers discharge into the river. The mouths of the sewers are about 30 feet out in the stream from low-water mark on the beach. Judging from where the steamer lay while at Davenport the intake for the steamer's supply of drinking water must have been within 10 or 20 feet of—perhaps immediately over—one of the sewer outlets.

The salient features in the histories of the 13 cases of typhoid fever which developed among the persons who went on the excursions of either July 29 or July 30 are presented in the table on page 1966.

Summary of cases of typhoid fever among excursionists.

Case No.	Address.	Definite onset of typhoid.	Onset of diarrheal attack.	Number in household in house-excursion.	Number had diarrheal attack.	Drank water on steamer.	Besides water on steamer ate or drank while on excursion anything not taken from home.	Water used at home.	Source of milk used at home.	Contact with typhoid cases during 30 days prior to onset of illness.	Remarks.
1	Olney Avenue, Clinton.	Aug. 5	July 31	5	4	Yes.....	No.....	Clinton city supply.	Sanitary Dairy	No.....	One who did not have diarrheal attack. Made trip down river, but not return trip.
2	Seventh Avenue, Clinton.	Aug. 12	None.....	7	2	Yes.....	do.....	do.....	Clover Leaf Dairy.	No.....	Patient's sister, who went, did not drink water on steamer.
3	Pearl Street, Clinton.	Aug. 13	July 30	7	3	Yes.....	Ice cream on steamer.	Private well..	Own cow.....	No.....	
4	Stockholm Street, Clinton.	Aug. 14	do.....	7	2	Yes.....	do.....	Clinton city supply.	Sanitary Dairy	No.....	Sister's diarrheal attack persisted for four weeks.
5	Elm Street, Clinton.	Aug. 18	None.....	4	2	Yes.....	do.....	do.....	Caeser's Dairy.	No.....	Patient's mother ate ice cream, but drank no water on steamer, and not sick.
6	Kenilworth Court, Clinton.	do.....	do.....	5	2	Yes.....	No.....	do.....	Seymour's & Peterson's Dairies.	No.....	Patient died Sept. 2. Of 3 in family who drank water on steamer, 2 had diarrhea and 1 typhoid.
7	Fifth Street, Lyons, Iowa.	Aug. 24	July 30	7	6	Yes.....	Ice cream in Davenport.	do.....	Tigh Dairy....	No.....	All in party except one, who later had typhoid, ate ice cream on steamer.
8	Fourth Avenue, Clinton.	Sept. 4	do.....	5	4	Yes.....	Ice cream on steamer.	do.....	Seymour's Dairy.	No.....	Was "droopy" after diarrheal attack of one week's duration until onset of typhoid.
9	Camanche, Iowa.	Aug. 10	July 31	9	4	Yes.....	No.....	Well at home.	Neighbor's cows.	No.....	Patient died Sept. 7. Two in party who did not get sick drank water while on steamer only from barrel in engine room.
10	do.....	Aug. 12	July 30	5	3	Yes.....	do.....	do.....	do.....	No.....	Died about Sept. 5.
11	Fenton, near Albany, Ill.	Sept. 5	do.....	8	5	Yes..... (?)	do.....	do.....	do.....	No.....	Member of party who did not get sick drank no water on steamer.
12	Sabula, Iowa.	Aug. 14	Aug. 1	6	4	Yes.....	Ice cream on steamer.	Sabula supply	Sabula dairies.	No.....	Went on excursion from Sabula to Dubuque on July 30.
13	do.....	Aug. 17	July 31	3	1	Yes.....	No.....	do.....	do.....	No.....	Do.

The ages of the persons among whom the 13 cases of recognized and reported typhoid fever occurred were as follows:

	Number of cases.
5 to 9 years.....	2
10 to 14 years.....	3
15 to 19 years.....	2
20 to 24 years.....	3
25 to 29 years.....	1
40 to 49 years.....	2
Total.....	13

Besides the 13 frank cases of typhoid which developed among those who went on the excursions, there were 8 or 10 cases reported by physicians as suspected cases, but which were not positively diagnosed.

POSSIBLE SOURCES OF THE INFECTION.

At the beginning of the investigation the first fact to be determined was whether the infection in Clinton had been of local distribution in Clinton or was contracted in the course of the excursion. The freedom of the residents who did not go on the excursion from the outbreaks of illness and the synchronous occurrence of outbreaks of identical nature among persons who had not been in Clinton, but who went from other towns on the same excursion, and the freedom from attack of the residents of the other towns who did not go on the excursion showed definitely that the infection must have been contracted in the course of the excursion. The next question was whether the infection had resulted from some condition on board the steamer or from some condition to which the excursionists were exposed while ashore in Davenport.

Upon investigation it was found that among a population of about 48,000 in Davenport there had been in the period from July 29 to September 5 no outbreak of either diarrhea or typhoid fever. According to information received from the local health department there were only about 12 cases and no deaths reported from typhoid fever in Davenport during the two months of August and September. The only possible source of infection which was common to any large proportion of the excursionists while they were in Davenport was the city water supply. Had this been the source of the infection for the excursionists the Davenport people necessarily would have been affected. Furthermore, no condition in respect to foods and beverages to which the excursionists were exposed while ashore in Davenport on July 29 could have affected the Sabula people who went on the Dubuque excursion on July 30.

From these facts and all other facts definitely established by the investigation there was left no room for doubt that the condition responsible for the infection was on board the steamer; that this condition became operative at some time between the arrival of the steamer at Davenport and the arrival at Albany, on the return trip, on the afternoon of July 29; that it was still operative when some of the passengers went aboard at Sabula on the morning of July 30 for the Dubuque excursion, but ceased to be operative before the steamer left Savanna on the morning of July 30.

Some of the passengers who went aboard at Sabula remembered drinking water aboard the steamer on the morning of July 30 while the steamer was either at the landing there or on the way across the river to Savanna. Others could not remember positively whether they drank any water on the steamer before the departure from Savanna.

One history obtained at Sabula was for a time misleading and emphasizes the need of giving careful consideration to the possibilities of coincidence in the course of such epidemiological investigations. This history was that of a young man who joined the excursion party on the return trip from Dubuque on July 30. He went aboard at Bellevue and made the trip only from there to Sabula via Savanna. He became ill with fever on July 31. His illness continued for about 2 weeks, and in the course of the attack he had some vomiting and purging. His clinical history was quite similar to the histories in a small proportion of the cases which developed among the persons who went on the excursion of July 29. In view of all the findings subsequent to the visit of the writer to Sabula, it is highly probable that the illness of this young man was caused by infection having a source different from that which caused the outbreaks among the Sabula people who made the excursion trip from Sabula to Dubuque on the morning of July 30, and among the excursionists from Lyons, Clinton, Camanche, and Albany, on July 29. Among the conditions on board the steamer to be considered as possibly responsible for infection which had caused such outbreaks were those associated with the following:

- (1) The foods and beverages taken aboard the steamer by the excursionists.

- (2) The foods and beverages—sandwiches, ice cream, and soft drinks—sold to the excursionists on the steamer.

- (3) The drinking water supply (including the ice used in the tanks) furnished the excursionists while they were on the steamer.

The lunch baskets containing the foods and beverages taken aboard by the excursionists came from many different homes, and only a small group of persons was exposed to any possible infection which might have been contained in the foods or beverages in any one of the lunch baskets. So far as could be ascertained there was between the many different groups very little interchange of contents of lunch baskets, and certainly not enough to cause any considerable proportion of the excursionists to be exposed to the contents of any one or several lunch baskets. Besides, the excursionists from Sabula on July 30 could not have eaten from the lunch baskets used by the excursionists of July 29.

Of the cases of illness which developed among the persons who went on one or the other of the excursions a large proportion was in those who ate or drank nothing while on the excursion except water aboard the steamer and foods taken from their own homes. Some of the soft drinks sold aboard the steamer were said to have been made in part with water taken from the tanks on the steamer. The summary on page 1966 shows that of the 13 cases of typhoid 5 were in persons who ate ice cream bought on the steamer. Seven of the cases gave a definite history of not having eaten ice cream bought on the steamer; so that, obviously, the ice cream sold on the steamer could not have been the source of the infection for the majority of the cases. Many of the excursionists who subsequently had the

diarrheal attack gave definite histories of not having eaten or drunk while on the steamer anything except the drinking water on board and things taken from their homes. According to information received from the steamship company the ice cream sold aboard the steamer on July 29 and until the steamer reached Dubuque on July 30 was obtained from one dealer in one shipment.

Therefore the excursionists who went from Savanna, Bellevue, and Sand Prairie on the upriver trip to Dubuque, and who ate ice cream bought on the steamer, were furnished from the same lot of ice cream furnished the excursionists of July 29 and the excursionists from Sabula on the morning of July 30.

Ice was used in the drinking-water tank on the steamer from which all of the excursionists who subsequently were attacked drank water, and, therefore, all of the cases of illness in the outbreaks were in persons who had been exposed to whatever infection may have been in the ice.

On general epidemiological principles, it is highly improbable that natural ice harvested from the Mississippi River and stored for 5 or 6 months would contain infection in sufficient dosage to cause among persons who drank water cooled with the ice an outbreak of such severity and extent as that which developed among the persons who went on the excursion of the steamer *G. W. Hill* on July 29. It should be remarked, however, that much of the ice harvested from the Mississippi River, often, it appears, without due regard being given to the proximity of the ice field to sewer outlets, must be regarded as being of somewhat doubtful purity.

According to information received from the steamship company and from the ice dealer concerned the ice used in the water tanks on the steamer on July 29 was natural ice harvested from the river the winter before. The vast bulk of the batch of ice of which that furnished the steamer was a part was distributed among many different consumers in Lyons and Clinton, who were not affected by any extensive outbreak of illness.

The same lot of ice furnished the steamer by a dealer in Lyons, on July 29 was used in the water tanks the whole of that day and until the steamer reached Dubuque on July 30. Therefore, the excursionists from Savanna, Bellevue, and Sand Prairie on July 30 drank water cooled with ice from the same lot—if not the same pieces—as that used to cool the water drunk by the excursionists of July 29.

In view of all the facts it is possible that the ice, the ice cream and other foods used on the steamer may have contributed to the infection responsible for the outbreaks, but it seems certain that they could not have been either the sole or the principal source of the infection. Every circumstance pointed to the drinking water furnished from the tank on the upper deck of the steamer as the principal or sole immediate source of the infection.

THE WATER SUPPLY.

In a letter to the writer from the owners of the steamer *G. W. Hill*, dated October 10, 1912, is the following statement:

The drinking water furnished on the steamer *G. W. Hill* during the months of July and August was pumped from the Mississippi River while in the channel, and never close to any town, through a stone filter which rendered the water perfectly clear, and guaranteed by the St. Louis Filter Co. to be perfectly pure. The water furnished on July 29 and 30 was supplied in the same manner.

According to statements obtained by the writer from over a hundred persons who were on the excursion of July 29 or that of July 30, the water obtained from the tank on the upper deck of the steamer was decidedly turbid, and particularly so on the return trip from Davenport on July 29. If the water at that time was not "perfectly clear," it is quite probable that it was not "perfectly pure."

According to information received from two of the excursionists, water was pumped into the tank on the upper deck while the vessel was at the landing at Davenport.

The capacity of the drinking-water tank from which the passengers were supplied was about 150 gallons. To supply the 1,550 passengers on board on a warm day the tank must have been filled four or five times during the excursion of July 29. Considering the sewage pollution of the river, the writer does not regard any place in the river between Clinton and Davenport as a safe source of water for drinking. During the stay of three hours at Davenport it is probable that there was most of the time a scattering of passengers on the steamer, and when, just before leaving, all the passengers came aboard, many of them thirsty, there must have been a heavy drain on the drinking-water supply. So far as could be ascertained from statements of all the passengers interviewed, there was at no time a shortage of water in the tank, the taps on the pipes leading from the tank when opened always yielded water, and particularly turbid water at the time of the departure from Davenport. Some of the passengers stated that the water contained trash and small sticks. It was stated by the steamship company that none of the crew, consisting of about 40 men, were attacked with either diarrhea or typhoid in the 5 or 6 weeks following the excursion of July 29.

Some of the passengers, who stated that they drank water from the barrel near the engines but none from the tank on the upper deck, did not get sick. It is probable that most of the water used by the crew was taken from the barrel. Furthermore, not every passenger who drank water from the tank got sick. Several weeks prior to the time of this investigation the steamer had gone out of commission and the crew was not interviewed. The writer, accompanied by the general manager of the line, made an inspection of the steamer on October 11. The steamer was then at Quincy, Ill., laid up for repairs.

So far as the writer could make out, the arrangement of the pipes was such that water could not be pumped into the tank on the upper deck without being passed through a stone filter. He was informed that the pressure—usually from 20 to 30 pounds—employed to pump the water from the intake at the bottom of the steamer, forced the water through the filter and then up into the tank on the upper deck, about 25 feet above the intake. It is highly improbable that water filtered so rapidly and under such pressure would be efficiently filtered. From all points in the evidence collected it is clear that if the water which was pumped to the tank, while the steamer was at Davenport or sometime shortly after leaving Davenport on July 29, was filtered, it was not efficiently filtered.

While at St. Louis on October 10, the writer looked into the matter of water supplies used on steamers generally—both excursion steamers and packets—plying between St. Louis and St. Paul and between intermediate points along the river. He found that the general custom for these steamers is to take water for drinking purposes from

the Mississippi River. On most of the vessels the water is run through some device on board designated as a filter. Such filters, as they are, and operated, as they usually must be, are necessarily of low efficiency. While aboard one passenger vessel at a wharf in St. Louis in the immediate neighborhood of sewer outlets the writer was given a demonstration of the filtration of the water supply for that steamer. Especial pains apparently were taken in making the demonstration, but in spite of the pains the water persisted in being muddier after it had been passed through the filter than it was before. Evidently the mud collected in the filter was being washed through.

In view of the conditions associated with the water supplies furnished on steamers plying on the upper Mississippi River it is not surprising that an extensive outbreak of sickness caused by water-borne infection did develop among the passengers on one of these vessels, viz, the steamer *G. W. Hill*, but it is surprising that such outbreaks have not occurred on numerous occasions.

CONCLUSIONS.

1. The outbreaks of diarrhea and typhoid fever which occurred among the persons who went on one of the excursion trips made by the steamer *G. W. Hill* on July 29 and July 30, 1912, were caused, beyond reasonable doubt, by infection in the drinking water supplied aboard the steamer.

2. The infected water was pumped into the tank on July 29 while the vessel was either at the landing at Davenport or at some point in the river between Davenport, Iowa, and Albany, Ill.

3. The bulk of the evidence strongly suggests that the infected water was pumped into the drinking-water tank while the steamer was at the landing and a short while before leaving Davenport on July 29.

4. The water supplies used generally on the steamers plying on the Mississippi River along its course between St. Louis and St. Paul are potentially dangerous and the methods of obtaining such water supplies should be corrected and conducted under official supervision.

RECOMMENDATIONS.

1. That water supplies used on river steamers and sanitary conditions generally pertaining to such steamers be made subject to adequate official inspection, the vessels plying between ports in different States to be inspected from time to time by officers of the United States Public Health Service and those plying between ports in the same State to be inspected from time to time by State or municipal health officers.

2. That all steamers plying on the Mississippi River be required to furnish water for drinking purposes for persons on board which will be demonstrably free from potential danger.

3. That steamers take their water supplies from sources—such as city or town water supplies along the river—certified as being safe by National or State health officials.

UNITED STATES.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

[Adopted since June 30, 1911.]

For the purpose of making readily available to health authorities and other sanitarians the sanitary measures being currently adopted by the various States, State and Territorial laws and regulations pertaining to the public health will be published in the Public Health Reports as soon after their enactment or promulgation as copies can be secured from the respective State authorities.

The period to be covered will begin with July 1, 1911. The laws and regulations to be published will include those adopted by the several States, Territories, and the District of Columbia since June 30, 1911, as follows:

1. Laws relating to the public health.
2. Laws making appropriation for public-health work, including salaries.
3. Laws affecting the organization, powers, or duties of boards of health, health officers, or departments of health.
4. Regulations pertaining to the public health promulgated by State or Territorial authorities pursuant to law.

CONNECTICUT.

CERTIFICATES BY LICENSED EMBALMERS IN CASES OF DEATH DUE TO CONTAGIOUS DISEASE—AN ACT APPROVED JULY 11, 1911, CHAPTER 142.

When any person shall have died from cholera, yellow fever, diphtheria, membranous croup, typhus fever, typhoid fever, scarlet fever, measles, leprosy, smallpox, or other pestilential disease, no person except a duly licensed embalmer shall sign the certificate required by section 1862 of the general statutes and amendments thereof to be signed by the undertaker or person in charge of the burial of the deceased person or the certificate, provided for in said section and amendments thereof, that the body has been disinfected or inclosed in a sealed casket or case, and no burial permit shall be issued in any such case upon a certificate not so signed by a licensed embalmer.

OCCUPATIONAL DISEASES—NOTIFICATION OF CASES—AN ACT APPROVED JULY 18, 1911, CHAPTER 159.

SECTION 1. Every physician shall report, in writing, to the commissioner of the bureau of labor statistics every case, occurring in his practice, of poisoning from lead, phosphorus, arsenic, or mercury, or their compounds, or of anthrax, or of compressed-air illness, contracted, in the opinion of the physician, as the result of the nature of the patient's employment. Such report shall be made by such physician within one week after his recognition of the disease, and shall state the name, post-office address, and place of employment of the patient, and the disease from which, in the opinion of the physician, the patient is suffering. For each such report the physician making the same shall receive a fee of 50 cents, to be paid by the commissioner of the bureau of labor statistics as a part of the expenses of his office.

SEC. 2. This act shall take effect September 1, 1911.

ANTITOXIN AND VACCINE FOR FREE USE OF THE PEOPLE—AN ACT APPROVED
JULY 25, 1911, CHAPTER 161.

The State board of health is hereby empowered to procure, either by purchase or production, diphtheria antitoxin, tetanus antitoxin, and vaccine lymph, for the free use of the people of the State, said antitoxin and lymph to be distributed to the town health officers as needed.

DAIRY AND FOOD COMMISSIONER—POWERS AND DUTIES OF—AN ACT APPROVED
AUGUST 22, 1911, CHAPTER 189.

Chapter 137 of the public acts of 1907 is hereby amended to read as follows:

"The dairy and food commissioner shall make an examination of the premises of any farm or dairy, or any place where cattle, dairy stock, or other domestic animals are kept, within this State, where any unsanitary condition liable to affect the products of such farm or dairy exists, or is reported or suspected to exist. When any such condition shall be found by said dairy and food commissioner, he shall notify the owner or occupant of the premises upon which such condition exists to remove or abate the same, at the expense of such owner or occupant, within such time as the dairy and food commissioner shall direct, and the dairy and food commissioner may, by notice in writing to the owner or occupant, prohibit the sale of any milk or milk products produced on any farm or in any dairy the owner or occupant of which neglects or refuses to comply with any order of the dairy and food commissioner to remove or abate any unsanitary condition, existing on such premises, which is liable to affect the products of such farm or dairy, until such unsanitary condition is removed or abated to the satisfaction of said commissioner and such prohibition is terminated by him, in writing. The dairy and food commissioner may employ such assistants as shall be necessary to enforce the provisions of this act, and said commissioner and his assistants shall have free access, at all reasonable hours, to all such premises and places for the purpose of making the examination provided for by this act. Every person who refuses such access, or who sells any milk or milk product of any farm or dairy the sale of which has been prohibited as hereinbefore provided, shall be fined not more than \$25, or imprisoned not more than 30 days, or both."

BURIAL PERMITS—AN ACT APPROVED AUGUST 29, 1911, CHAPTER 214.

Section 1864 of the general statutes is hereby amended by inserting after the word "provided," in the ninth line of said section, the words "and also to issue removal permits based upon a death certificate, as provided in sections 1867 and 1871 of the general statutes, and amendments thereof," so that said section as amended shall read as follows:

"No deceased person shall be buried in the town in which such person shall have died until a burial permit, stating the place of burial and that the certificate of death required by law has been returned and recorded, has been given by the registrar, who shall issue such permit whenever such certificate of death has been received by him, and the registrar shall record the place of any burial other than in a public cemetery. The town registrar may appoint suitable and proper persons, not exceeding two in number in any town, as subregistrars, who shall be authorized to issue burial permits, based upon a death certificate, as hereinbefore provided, and also to issue removal permits, based upon a death certificate, as provided in sections 1867 and 1871 of the general statutes and amendments thereof, in the same manner as is required of the town registrar; and every such certificate of death upon which a permit is issued shall be forwarded to the registrar within seven days after receiving said certificate. The appointment of subregistrars shall be made in writing, with the approval of the selectmen of said town, and be made, with reference to locality, so as to best accommodate the inhabitants of the town. Said subregistrars shall be duly sworn, and their term of office shall not extend beyond the term of office of the appointing registrar."

TENEMENT, LODGING AND BOARDING HOUSES—SANITARY CONDITION OF—AN ACT
APPROVED AUGUST 29, 1911, CHAPTER 220.

SECTION 1. Certain terms, when used in this act, are defined as follows: (1) "Tenement house" means any house or building, or portion thereof, which is rented, leased, let, or hired out to be occupied, or is arranged or designed to be occupied, or is occupied, as the home or residence of three or more families living independently of each other and doing their cooking upon the premises, and having a common right in the

halls, stairways, or yards. (2) "Lodging house" or "boarding house" means any house or building, or portion thereof, in which six or more persons are harbored, received, or lodged for hire, or any building, or part thereof, which is used as a sleeping place or lodging for six or more persons not members of the family residing therein. (3) "Apartment" means a room or suite of rooms occupied or designed to be occupied as a family domicile. (4) "Yard" means an open, unoccupied space on the same lot with a tenement, lodging, or boarding house, between the real line of such house and the rear line of the lot. (5) "Court" means an open, unoccupied space, other than a yard, on the same lot with a tenement, lodging, or boarding house. (6) "Public hall" means a hall, corridor, or passageway not within an apartment.

SEC. 2. Every tenement, lodging, or boarding house, and every part thereof, shall be kept clean and free from any accumulation of dirt, filth, garbage, or other matter, in or on the same, or in the yards, courts, passages, areas, or alleys connected with or belonging to the same. The owner of every tenement, lodging, or boarding house, or part of such house, shall cleanse thoroughly all the rooms, passages, stairs, floors, windows, doors, walls, ceilings, privies, water-closets, cesspools, drains, halls, cellars, roofs, and all other parts of such house, or the part of such house of which he is the owner, to the satisfaction of the board of health, and shall keep the same in a cleanly condition at all times. The owner of every tenement house shall provide, for such building, suitable receptacles for, or conveniences for the disposal of, garbage, ashes, and rubbish.

SEC. 3. Every tenement house, and all parts thereof, shall be kept in good repair, and the roofs shall be so kept as not to leak, and all rain water shall be so drained and conveyed therefrom as to prevent its dripping onto the ground or causing dampness in the walls, ceilings, yards, or areas.

SEC. 4. No horse, cow, calf, swine, poultry, sheep, or goat shall be kept in any tenement house or lodging house, or on the lot or premises thereof, unless stabled at least 20 feet distant from every building used for living purposes, and then only when such stabling is not detrimental to health, in the opinion of the board of health. No tenement, lodging, or boarding house, or any part thereof, shall be used for the handling, keeping, or storing of combustible articles or rags, or any other articles, in a manner deemed by the board of health to be dangerous or detrimental to health.

SEC. 5. Whenever any tenement, lodging, or boarding house, or any building, structure, excavation, business pursuit, matter, or thing in or about such house or the lot on which it is situated, or the plumbing, sewerage, drainage, light, or ventilation of such house, is, in the opinion of the board of health, in a condition which is, or in its effect is, dangerous or detrimental to life or health, said board may declare that the same, to the extent specified by said board, is a public nuisance, and may order the same to be removed, abated, suspended, altered, or otherwise improved or purified, as the order shall specify. The board of health may also order or cause any tenement house, or part thereof, or any excavation, building, structure, sewer, plumbing pipe, passage, premises, ground, matter, or thing in or about a tenement, lodging, or boarding house or the lot on which such house is situated, to be purified, cleansed, disinfected, removed, altered, repaired, or improved. If any order of the board of health is not complied with, or so far complied with as said board shall regard as reasonable, within five days after the service thereof, or within such shorter time as said board shall designate, then such order may be executed by such board through its officers, agents, employees, or contractors.

SEC. 6. Whenever it shall be certified by the board of health that a tenement, lodging, or boarding house, or any part thereof, is infected with contagious disease, or that it is unfit for human habitation or dangerous to life or health by reason of want of repair or of defects in the drainage, plumbing, ventilation, or construction of the same, or by reason of the existence on the premises of a nuisance liable to cause sickness among the occupants of such house, the board of health may issue an order requiring all persons therein to vacate such house, or part thereof, within not less than 24 hours nor more than 10 days, for the reasons mentioned in such order. In case such order is not complied with within the time so specified, the board of health may cause such house, or part thereof, to be vacated. The board of health, whenever satisfied that the danger from such house, or part thereof, has ceased to exist, or that such house is fit for human habitation, may revoke such order, or may extend the time within which the same may be complied with.

SEC. 7. If a room in a tenement, lodging, or boarding house is overcrowded, the board of health may order the number of persons sleeping or living in such room to be so reduced that there shall not be less than 500 cubic feet of air to each adult, and 300 cubic feet of air to each child under 12 years of age, occupying such room.

SEC. 8. Water in sufficient quantity shall be provided on each floor, occupied by one or more families, in every tenement house which is located on premises abutting on a street or alley in which pipes for the distribution of water to the public are laid,

and when such house is not so located a sufficient supply of wholesome water shall be provided on a part of the lot where it will not be contaminated from water-closets, barns, garbage, or other sources of impurity.

SEC. 9. Every building used as a tenement, lodging, or boarding house shall be furnished with adequate and suitable privy vaults or water-closets. There shall be at least one such closet or vault for every two apartments of three rooms, or less, each, and one such closet or vault for every apartment of four or more rooms. The vaults, privies, or water-closets in or belonging to any tenement, boarding, or lodging house located on premises abutting on any street or alley through which there is a sewer with which connection may be had shall be connected with such sewer by the owners, lessees, or agents of such property, whenever so required by an order of the board of health. In every tenement, lodging, or boarding house having running water and a sewer connection, and which is three or more stories in height, the water-closets required for the occupants of the third and higher stories shall be located on or above the third floor of such house. Every bathroom or water-closet compartment in a tenement, lodging, or boarding house shall be ventilated by an outside window, or a window opening upon a vent shaft, or by a separate ventilating flue, of noncorroding material and at least 36 square inches in area, leading directly to the roof; and every such bathroom or water-closet compartment, not otherwise sufficiently lighted, shall be provided with light from an adjoining room or rooms by means of translucent glass, of adequate size, in a fixed sash.

SEC. 10. Dark and poorly ventilated public halls in tenement, lodging, or boarding houses shall be remedied in such manner as is deemed practicable and ordered by the board of health. No room in a tenement, lodging, or boarding house shall be used as a sleeping room unless it has an outside window or is provided with a sash window opening into an adjoining room, in the same apartment, having an outside window, which sash window shall be a vertically sliding, pulley-hung sash, both halves of which shall be so constructed as to open readily, and the lower half shall be glazed with translucent glass. The walls of any court, shaft, hall, or room shall be whitewashed or painted a light color whenever, in the opinion of the board of health, such whitewashing or painting is needed for the better lighting of any room, hall, or water-closet compartment.

SEC. 11. The provisions of this act shall apply to and be in force in all cities and boroughs only. It shall be the duty of the board of health of each city or borough to enforce the provisions of this act, and such board of health is hereby given authority for such purpose. All duties imposed and powers conferred by this act upon boards of health shall devolve upon the health authority of each city or borough by whatever name such health authority may be known.

SEC. 12. Every person who shall violate or assist in violating, or shall fail to comply with, any of the provisions of this act or any legal order of a board of health made under any of such provisions shall be fined not more than \$200, or imprisoned not more than 60 days, or both; and every person who shall continue to violate or assist in violating, or who shall continue to fail or refuse to comply with, any of the provisions of this act, after having been convicted of violating or assisting in violating any of said provisions, or of failing to comply therewith, shall, upon a subsequent conviction, be imprisoned not more than six months. The county health officer of the county or the prosecuting authorities of the city or borough shall have power to prosecute for any such offense.

ASSISTANT REGISTRARS—REPEALING SECTION 1856 OF THE GENERAL STATUTES—AN ACT APPROVED SEPTEMBER 5, 1911, CHAPTER 236.

Section 1856 of the general statutes concerning assistant registrars is hereby repealed.

THE TENEMENT-HOUSE ACT—AN ACT APPROVED SEPTEMBER 12, 1911, CHAPTER 241.

SECTION 1. Chapter 178 of the public acts of 1905 is hereby amended to read as follows:

"This act may be cited as the tenement-house act, and its provisions shall apply to all cities and boroughs, except its provisions concerning water-closets, which provisions shall apply to all cities and boroughs which have a water supply and a sewer system."

SEC. 2. Certain words used in this act are defined, for the purposes of this act, as follows: (1) A tenement house is any house or building, or portion thereof, which, if rented, leased, let, or hired out, to be occupied, or is arranged or designed to be occupied, or is occupied as the home or residence of three families or more, living independently of each other, and doing their cooking upon the premises, and having a common right in the halls, stairways, or yards. (2) A yard is an open unoccupied

space on the same lot with a tenement house, between the extreme rear line of the house and the rear line of the lot. (3) A court is an open unoccupied space, other than a yard, on the same lot with a tenement house; a court not extending to the street or yard is an inner court; a court extending to the street or yard is an outer court; if it extends to the street it is a street court; if it extends to the yard it is a yard court. (4) A public hall is a hall, corridor, or passageway not within an apartment. (5) A basement is a story partly, but not more than one-half, below the level of the grade. (6) A cellar is a story more than one-half below the level of the grade. (7) The word "shall" is mandatory and not directory, and denotes that the house shall be maintained in all respects according to the mandate, as long as it continues to be a tenement house. (8) In determining the number of stories in a tenement house, a basement or an attic shall be counted as a story if it is occupied or designed to be occupied for living purposes.

SEC. 3. No tenement house hereafter erected shall occupy more than 90 per cent of a corner lot, or more than 75 per cent of any other lot less than 60 feet in depth, or more than 70 per cent of any other lot 60 feet or more in depth: *Provided*, That the space occupied by fire escapes shall not be deemed a part of the lot occupied. For the purposes of this section the measurements shall be taken at the ground level, except that where such a building has no basement, and the cellar ceiling is not more than 3 feet above the grade level, the measurements as to the percentage of the lot occupied may be taken at the level of the second tier of beams. The provisions of this section shall not apply to a tenement house hereafter erected running through from one street to another street: *Provided*, That the lot on which such house is situated does not exceed 100 feet in depth. When a corner lot is more than 40 feet in width, that part of such lot which is in excess of said 40 feet shall conform to the requirements of this section regarding a lot which is not a corner lot.

SEC. 4. Behind every tenement house hereafter erected, unless the house extends through from one street to another street, there shall be a yard extending across the entire width of the lot and, at every point open, from the ground to the sky unobstructed; but fire escapes or uninclosed outside stairs may project not over 6 feet from the rear line of the house. The depth of said yard, measured from the extreme rear wall of the house to the rear line of the lot, shall be as set forth in sections 5 and 6 of this act.

SEC. 5. Except upon a corner lot, the depth of the yard behind every tenement house hereafter erected, two stories in height, shall be not less than 11 feet in every part; and such yard shall be increased in depth 1 foot for every additional story above two stories in the height of the building.

SEC. 6. The depth of the yard behind every tenement house hereafter erected upon a corner lot shall be not less than 10 feet in every part: *Provided*, That where such lot is less than 100 feet in depth, the depth of the yard may be not less than 10 per cent of the depth of such lot, but shall never be less than 7 feet in every part nor less than the minimum width of an outer court on the lot line as prescribed by section 8. Where a tenement house hereafter erected on a corner lot has no basement, and the cellar ceiling is not more than 3 feet above the grade level, said yard may start at the level of the second tier of beams. Where a corner lot is more than 40 feet in width, the yard for that portion in excess of 40 feet shall conform to the provisions of section 5 of this act.

SEC. 7. No court of a tenement house hereafter erected shall be covered by a roof or skylight, but every such court shall be at every point open from the ground to the sky unobstructed.

SEC. 8. Where one side of an outer court is situated on the lot line, the width of such court measured from the lot line to the opposite wall of the building, for tenement houses hereafter erected, shall be not less than 4 feet in any part, for houses two stories in height, and for every additional story above the two stories in the height of such building such width shall be increased 1 foot throughout the entire height of such court; but this requirement shall not prevent a building from approaching nearer the lot line: *Provided*, That no room in the building obtains its light or ventilation from windows opening upon such narrower court.

SEC. 9. Where an outer court is situated between wings or parts of the same building, or between different buildings on the same lot, the width of such court, measured from wall to wall, for tenement houses hereafter erected two stories in height, shall be not less than 8 feet in any part, and for every additional story above two stories in the height of such building such width shall be increased 2 feet throughout the entire height of such court.

SEC. 10. Where one side of an inner court is situated on the lot line the width of such court, measured from the lot line to the opposite wall of the building, for tenement houses hereafter erected two stories in height, shall be not less than 5 feet in any part,

and the other horizontal dimension shall be not less than 10 feet in any part, and for every additional story above two stories in the height of such building such width shall be increased 18 inches throughout the entire height of such court and the other horizontal dimension shall be increased 3 feet throughout the entire height of such court.

SEC. 11. Where an inner court is not situated upon the lot line, but is inclosed on all four sides, the least horizontal dimension of such court, for tenement houses hereafter erected two stories in height, shall be not less than 10 feet, and for every additional story above two stories in the height of such building such court shall be increased 3 feet in each horizontal dimension throughout the entire height of such court.

SEC. 12. Every inner court shall be provided with one or more horizontal intakes at the bottom. Such intakes shall always communicate directly with the street or yard, and shall consist of a passageway of not less than 10 square feet in area, which shall be left open, or if not open there shall be provided in such passageway open grilles or transoms, and such open grilles or transoms shall not be covered over by glass or otherwise.

SEC. 13. Nothing contained in the foregoing sections concerning outer and inner courts shall be construed as preventing windows at the angles of such courts, provided that the running length of the wall containing such windows does not exceed 6 feet. Offsets or recesses in outer or inner courts may be made, provided that the width of such offsets or recesses shall in every case be equal to or greater than the depth. When a tenement house hereafter erected has no basement, the courts mentioned in the preceding sections may start at the level of the second tier of beams, and if no part of the first story of such building is designed to be or is used for the purposes of a dwelling the first story of the building may be omitted in computing the number of stories for the purposes of this act. No portion of land lying between two tenement houses shall be counted as any part of the required court or yard space of more than one building.

SEC. 14. No tenement house shall hereafter be erected upon the rear of a lot where there is a tenement house on the front of such lot, nor upon the front of any such lot upon the rear of which there is such a tenement house, unless the distance between the two tenement houses is at least 30 feet. No tenement house hereafter erected shall be over four stories in height unless it is equipped with a passenger elevator.

SEC. 15. In every tenement house hereafter erected every room, except water-closet compartments and bathrooms, shall have at least one window opening directly upon the street or upon a yard or court of the same lot, of the dimensions specified in sections 4 to 13, inclusive, of this act; and such windows shall be so located as to properly light all portions of such rooms and shall have a total area in each room of at least one-eighth of the area of the floor of the room.

SEC. 16. In every tenement house hereafter erected all rooms, except water-closet compartments and bathrooms, shall be of the following minimum sizes: In each apartment there shall be at least one room containing not less than 120 square feet of floor area, and each other room shall contain at least 70 square feet of floor area. Each room shall be in every part not less than 8 feet 6 inches high from the finished floor to the finished ceiling: *Provided*, That an attic room need be 8 feet 6 inches high in but one-half of its area. In interpreting this act alcove rooms shall be considered as separate rooms.

SEC. 17. In every tenement house hereafter erected the public hall upon each floor shall be provided with a window, or a glazed door, opening to the street, the yard, or upon a court of the size prescribed in sections 7 to 13, inclusive, of this act unless the hall is within three stories from the roof. In every such tenement house three stories or more in height where the public hall upon the third floor from the roof is not provided with an outside window or an outside glazed door, there shall be a stair well extending from such floor to the roof, such stair well to be at least 12 inches wide over such hall and at least 18 inches wide over the hall above. All doors leading from public halls not provided with outside windows, and more than two stories below the roof, shall be provided with translucent glass panels of an area of not less than 5 square feet for each door, or with fixed transoms of translucent glass of an area of not less than 5 square feet over each door, or such halls shall be lighted by an equivalent amount of translucent glass connecting with a lighted room or rooms. Long and devious hallways shall have such additional provisions as may be necessary to give adequate light, subject to the approval of the building inspector.

SEC. 18. In every tenement house hereafter erected one at least of the windows provided to light each public hall or part thereof shall be at least 10 square feet in area, measured between the stop beads. In every such house where the public halls upon each floor are not provided with windows opening directly to the outer air, there shall

be in the roofs, directly over each stair well, a ventilating skylight provided with ridge ventilators having a minimum opening of 40 square inches, or such skylight shall be provided with fixed or movable louvres; the glazed roof of such skylight shall be not less than 20 square feet in area.

SEC. 19. In every tenement house hereafter erected there shall be a water-closet in each apartment of three or more rooms and at least one water-closet for every two apartments of less than three rooms each. Each water-closet shall be in a separate compartment or bathroom, upon the same floor with the apartment which it accommodates. Each water-closet compartment or bathroom in any tenement house hereafter erected shall have a window opening directly upon the street, a yard, a court, or a vent shaft. Every such window shall be of at least 3 square feet in area and shall open freely. Every vent shaft in a tenement house hereafter erected shall be constructed of fire-proof material; not more than two water-closets or bathrooms shall open upon such a shaft on one floor of a tenement house, and no two water-closet or bathroom windows opening upon such shaft on the same floor shall be opposite each other. No such vent shaft shall be less than 30 inches in either dimension or less than 10 square feet in area. If the area of such shaft is less than 12 square feet, every bathroom or water-closet compartment below the upper story, and, if the area is less than 24 square feet, every bathroom or water-closet compartment below the second story from the roof, and opening into such shaft, shall be provided with additional light through translucent glass windows of at least 4 square feet in area, connecting with other portions of the tenement. Every such vent shaft shall be uncovered, or shall be provided with openings at the top equal in total area to the area of the vent shaft, and shall be provided with a horizontal intake or duct at the bottom communicating with the street or yard or with a court; such duct or intake shall be not less than 2 square feet in area, and shall be so arranged as to be easily cleaned out.

SEC. 20. In every apartment of three or more rooms, in a tenement house hereafter erected, access to every living room and bedroom and to at least one water-closet compartment shall be had without passing through any bedroom.

SEC. 21. In tenement houses hereafter erected, no room in the cellar or in the basement shall be constructed, altered, converted, or occupied for living purposes, unless all of the following conditions are complied with: (1) Such room shall be at least 8 feet 6 inches high, in every part, from the floor to the ceiling; (2) the ceiling of such room shall be at least 4 feet and 6 inches above the surface of the street or ground outside of or adjoining the same; (3) all walls surrounding such room shall be damp proof; (4) the floor of such room shall be damp proof and waterproof.

SEC. 22. The floor of the cellar or the lowest floor of every tenement house shall be water tight, and the cellar ceiling shall be plastered, except where the first floor above the cellar is constructed of iron beams and fireproof filling.

SEC. 23. No building, not used as a tenement house at the time at which this act takes effect, shall be converted to such use unless it complies with the provisions of this act in every respect except that the distance between the floors of an existing building need not be changed; provided, that every room of such tenement house shall measure at least 7 feet 8 inches from the finished floor to the finished ceiling.

SEC. 24. No tenement house shall be altered or added to so as to diminish the light, ventilation, or court or yard spaces existing before such alterations were made, in any way not approved by the department or officer charged with the execution of this act, or so as to infringe upon the standards set by this act in respect to new buildings; and all court or yard spaces adjacent to and under the same ownership with any tenement house and required by the standards set by this act in respect to new buildings shall be maintained as court and yard spaces so long as the building is maintained as a tenement house; and the number of stories of any tenement house shall not be increased unless the court and yard spaces adjacent to such house and under the same ownership conform to the standards set by this act in respect to new buildings of the proposed number of stories.

SEC. 25. Before the construction or alteration of a tenement house or the alteration or conversion of a building for use as a tenement house is commenced, the owner, or his agent or architect, shall submit to the building inspector or other local officer authorized to issue building permits, a detailed statement in writing, verified by the affidavit of the person making the same, of the specifications for the construction, and for the lighting and ventilation of such tenement house or building, upon a blank or form to be furnished by such officer, and shall also submit a copy of the plans of such work. Such statement shall give in full the name and residence, by street and number, of the owner or owners of such tenement house or building. If such construction, alteration, or conversion is proposed to be made by any other person than the owner of the land in fee, such statement shall contain the full name and residence, by street and number, not only of the owner of the land, but of every person thus interested in such tenement

house. The statements and affidavits herein provided for may be made by the owner, or the person who proposes to make the construction, alteration, or conversion, or by his agent or architect. No person, however, shall be recognized as the agent of the owner unless he shall file with such officer a written instrument signed by such owner, designating him as such agent. Such specifications and statements shall be filed with such officer and shall be deemed public records, but no such specifications or statements shall be removed from the custody of such officer. Such officer shall cause all such plans and specifications to be examined, and if such plans and specifications conform to the provisions of this act and to the building ordinances and regulations, they shall be approved by such officer, and a written certificate to that effect shall be issued to the person submitting the same. The officer may, from time to time, approve changes in any plans and specifications previously approved by him: *Provided*, That the plans and specifications when so changed shall be in conformity with law. The construction, alteration, or conversion of such tenement house, building, or structure, or any part thereof, shall not be commenced until the filing of such specifications, plans, and statements, and the approval thereof, as above provided.

SEC. 26. No building hereafter constructed as, or altered into, a tenement house shall be occupied, in whole or in part, for human habitation until the issuance of a certificate by the officer aforesaid that such building conforms in all respects to the requirements of this act. Such certificate shall be issued within 10 days after written application therefor, if such building, at the date of such application, shall be entitled thereto.

SEC. 27. If any building hereafter constructed as, or altered into, a tenement house be occupied in whole or in part for human habitation in violation of section 26, during such unlawful occupation no rent shall be recoverable by the owner or lessee of such premises for such period, and no action or special proceedings shall be maintained therefor.

SEC. 28. Nothing in this act shall be construed to abrogate or impair the powers of a local department of health, the fire department, or of the courts or any other lawful authority, to enforce any provisions of any city charter or building ordinances and regulations not inconsistent with this act, or to prevent or punish violations thereof.

SEC. 29. It shall be the duty of every inspector of buildings, fire marshal, or other person authorized to issue building permits, by whatever name known, to enforce the provisions of this act and to report all violations thereof to the proper prosecuting officer.

SEC. 30. Every owner or lessee of land, and every builder or architect who shall authorize, make, or approve any construction or alteration of any building in violation of the provisions of this act, shall be fined not less than \$25 nor more than \$500, and if any violation of any of said provisions remains uncorrected the violator shall be subject to a renewal of the foregoing penalty every 30 days until the violation is corrected.

SEC. 31. It shall be the duty of the commissioner of labor statistics to collect, keep on file in his office, and at his discretion publish data to be furnished by the officers charged in the several cities and boroughs with the execution of this act, showing the number of tenement houses for which permits have been asked, the number of plans approved, disapproved, and modified, and any other facts concerning the operation of the law. The records and files of said officers shall at all times be open to the commissioner of labor statistics for the purposes provided herein. Printed copies of this act and blank forms needed to carry out the provisions of this section and of section 26 of this act shall be supplied to the building inspectors of the several cities and boroughs by the commissioner of the bureau of labor statistics.

SEC. 32. This act shall take effect from its passage.

COMMON DRINKING CUP—USE OF—REGULATION STATE BOARD OF HEALTH ADOPTED
OCTOBER 25, 1911.

It shall be unlawful on and after January 1, 1912, to provide a common drinking cup in or upon the premises of any public building, hotel, restaurant, theater, public hall, schoolhouse, or store, and in any public park, street, railroad station, railroad car, or steamboat.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HYGIENE.

[Adopted since Jan. 1, 1912.]

GALESBURG, ILL.

FOODSTUFFS—PROTECTION OF—MARKETS, STORES, SHOPS, BAKERIES, SLAUGHTER- HOUSES, HOTELS, RESTAURANTS, AND BOARDING HOUSES—INSPECTIONS AND PENALTY.

SECTION 1. Every person keeping, maintaining, or being in charge of any factory, public or private market, stall, shop, store, storehouse, warehouse, cold storage, cart, wagon, or other vehicle, in or from which any meat, fish, oysters, birds, fowls, vegetables, fruit, milk, or other provisions are manufactured, held, kept, stored, or offered for sale or other disposition as food for human beings, shall keep same in clean, pure, and wholesome condition.

SEC. 2. All meats, fish, vegetables, game, fruit-prepared food products, and candies exposed for sale in open receptacles or broken packages shall be kept not less than 2 feet above floor of the building, shop, booth, or place where they are so exposed, and shall be protected in such manner as to prevent, as far as practicable, dust, flies, and insects from coming in contact with them. Cut fresh meats, fresh fish, and all fresh fruits (except citrus fruit, melons, bananas, and apples) exposed for sale shall be kept in properly ventilated cases or receptacles having glass tops. No food shall be disposed or displayed for sale upon any box, table, shelf, or other object on any street, sidewalk, alley, or public place, except in such places as have been designated as public markets, and except from wagons from which foodstuffs are being peddled, but all food so peddled from wagons shall be carefully covered so as to protect such foodstuffs from flies and dust.

SEC. 3. The kitchen of all restaurants, hotels, all candy factories, fish markets, meat markets, and bakeries, shall have good and proper screens at all openings in such places where flies or other insects can enter, for the purpose of excluding such insects from said places.

SEC. 4. No decayed matter of any kind shall be allowed to remain in any receptacle wherein are kept any fruits, meats, vegetables, or other food for sale.

SEC. 5. No meats, fish, game, vegetables, fruits, or other foodstuffs, prepared or unprepared, shall be kept for sale in any room in which a toilet is located, or in any room opening directly into a toilet room, unless there is outside ventilation to such toilet room.

SEC. 6. Every place where meats, fish, vegetables, fowls, fruits, groceries, or any food for human beings shall be kept for sale, there shall be in the room or rooms where business is carried on, where there is a public water supply, at least one running water faucet, with lavatory conveniences for the use of the employees.

SEC. 7. No baking of bread, cakes, or pies, or manufacture of candy, or cooking of food for sale, shall be done in any cellar, basement, or other room unless there be direct ventilation of the same.

SEC. 8. Flour, meal, and other cereal products shall be kept in a dry, airy room or rooms, so arranged, that the floors, shelves, and other facilities for storing the same can be easily cleaned and kept clean.

SEC. 9. Where persons employed in a bakery sleep on the premises, their sleeping quarters shall be separate from all rooms where flour, meal, or manufactured bakers' goods are kept or stored. And every person delivering bread or any other bakery product from any wagon or cart shall keep with such wagon or cart one or more pairs of clean gloves of canvas or similar material, which he shall wear while handling such bread or bakery products. And said gloves shall be used for no other purpose.

SEC. 10. Every person owning, managing, or in charge of any premises where meat, fish, oysters, fowls, fruits, or vegetables are canned, cured, or preserved for human food, shall conduct the same in a neat, clean, and sanitary manner; and no such person shall can, cure, or otherwise preserve any meat, fish, oysters, fowls, fruits, or vegetables for human food which shall have become diseased, decayed, or unwholesome; nor shall any such person can, cure, or otherwise preserve foods taken from

filthy boxes, baskets, or other containers, or use any chemical deleterious to health in the process of such canning, curing, or preserving. No preservative shall be used in meats except salt, salt peter, sugar, pure spices, wood smoke, and vinegar.

SEC. 11. No person maintaining or in charge of any restaurant, hotel, or boarding house, or other place where food is sold, served, or manufactured in either a cooked or raw state shall keep such place in a filthy or insanitary condition; and all persons employed in or about such places shall keep themselves and their clothing in a clean, sanitary, and healthful condition.

SEC. 12. No person suffering from tuberculosis or any other communicable disease shall be employed in or about any restaurant, hotel, or boarding house, or other place where food is sold or served, in any such manner that he or she will come in contact with such food.

SEC. 13. No person maintaining or in charge of any restaurant, hotel, or boarding house, or other place where food is served or sold, either in a cooked condition or otherwise, shall serve or sell, or cause to be served or sold, any tainted or diseased meat, fish, oysters, fowls, or any decayed or partially decayed or unwholesome fruit or vegetables, or any other unwholesome food whatever.

SEC. 14. No meat, fish, oysters, birds, fowls, fruits, vegetables, milk, or other provisions of any kind not being in a healthy, sound, and wholesome condition, and no part of any animal or fish that dies by accident or from disease shall be brought into the city of Galesburg for the purpose of sale or gift as human food, nor shall the same be offered for sale by any person at or in any public or private market, store, stall, warehouse, cold storage, or other place of business.

SEC. 15. No person shall keep live chickens, ducks, turkeys, or other fowls in any cellar or basement underneath any grocery store or other place where uncanned foodstuffs are kept or in any room where such foodstuffs are kept, prepared, offered for sale, or sold.

SEC. 16. Every slaughterhouse or other place where fowls are killed or prepared for sale or storage shall be constructed with a wood or cement floor with proper trap sewer connection with a sewer or cesspool, and such cesspool shall be of proper construction, walled up, arched over, and properly ventilated; and immediately after each killing of such fowls the floors shall be washed thoroughly, and the place shall at all times be kept clean and in a wholesome condition.

SEC. 17. Every person owning or managing any store, shop, or commission house where meats, fish, fowls, fruits, or vegetables are kept or offered for sale or sold, and every person owning or managing any hotel, restaurant, or boarding house is required to provide metallic receptacles with close-fitting covers sufficient for disposing of all garbage from their premises; and no person shall remove any such garbage from such receptacle after it has been deposited therein, except for the purpose of transporting the same to the place provided for the destruction or disposition thereof.

SEC. 18. No dog shall be allowed in any of the places of business mentioned in this ordinance or be brought therein by any customer thereof.

SEC. 19. It shall be the duty of the health officer, or his deputy, if one shall be provided, to visit and inspect at frequent intervals every public or private market, stall, shop, store, warehouse, cannery, factory, restaurant, cold storage, slaughterhouse, and all other places, and all carts, wagons, or other vehicles of venders or street hawkers in the city of Galesburg, in or from which any of the articles of food for human beings in this ordinance mentioned, are manufactured, kept, held, prepared, or offered for sale, and he or his deputy shall report to the commissioner of health any violation of the terms or provisions of this ordinance.

SEC. 20. In order to enable said health officer to make the inspections herein provided for, he shall have access to all parts of any building where business of the kind contemplated by this ordinance is carried on at all reasonable hours.

SEC. 21. Whenever the health officer shall find in or about any of the places or vehicles mentioned in section 19 hereof, any unhealthy, diseased, unwholesome, or deleterious foodstuffs of the kind mentioned in this ordinance, he may give notice to the owner or manager of such place to at once remove the said foodstuffs to such place as he may designate, and there destroy the same, and such owner or manager shall at once remove such foodstuffs to the place designated and destroy the same, or such health officer may seize such foodstuffs and destroy the same.

SEC. 22. The provisions of this ordinance shall apply to all factories for the manufacture and sale of ice cream, confectionery, and soft drinks, and all premises occupied by street venders in the manufacture of tamales, candy, and other like articles of food.

SEC. 23. No wagon transporting meat, fish, game, vegetables, fruit, or other perishable provisions shall proceed through the streets of the city with the same unprotected from contamination by flies and dust; but shall have the same covered with a tarpaulin or canvas cover.

SEC. 24. The word "person" whenever used in this ordinance shall include corporations, and the managing agents and servants thereof.

SEC. 25. The ventilation of rooms within the meaning of this ordinance shall consist of an opening to the outer air at each end of such room, said opening to be at least 2 feet square, and be placed so as to produce a free circulation of air in such room.

SEC. 26. Every person violating this ordinance, or any section or portion thereof, shall upon conviction be fined in any sum not less than \$5 nor more than \$200.

[Ordinance adopted July 15, 1912.]

GALVESTON, TEX.

VESSELS—DOCKING AND BERTHING OF, WITH SPECIAL REFERENCE TO VESSELS FROM PORTS INFECTED WITH PLAGUE.

SECTION 1. It shall be unlawful for any person in charge of any vessel having sailed from or having touched at a port infected with bubonic plague, or suspected of infection with bubonic plague, to dock, berth or moor, or to cause to be docked, berthed or moored, any such vessel at or to any wharf, pier, or bulkhead in the harbor of Galveston, without first having obtained written permission from the health physician of the city of Galveston so to do; and the person in charge of such vessel shall make written application to the said health physician for such permission, which application shall set forth the name of such vessel, the name of the master thereof, and the name of the agent or consignee, the character of the cargo contained in said vessel, the name of the port from which said vessel sailed, the name of all ports at which said vessel may have touched or called since said sailing, the time and place when and where said vessel was last fumigated, and the dock or pier in Galveston at which said vessel proposes to dock.

SEC. 2. It shall be unlawful for any person in charge of any vessel to lay, fasten, or cause to be laid or fastened any line, rope, or cable from said vessel to any wharf, pier, or bulkhead, or to any other vessel in the harbor of Galveston unless such line, rope, or cable is fixed and equipped with what is known as a rat protector or rat guard, the same being not less than 36 inches in diameter and of a pattern or design approved of by the city health physician.

SEC. 3. It shall be unlawful for any person in charge of any vessel to lay, place, or install or to cause to be laid, placed, or installed any plank, step, gangplank, or gangway from such vessel to any other vessel or to any wharf, pier, or bulkhead in the harbor of Galveston save and except during such time as said vessel may be actually receiving or discharging cargo or passengers, and immediately upon such vessel ceasing to receive or discharge cargo or passengers any and all planks, steps, gangplanks, or gangways leading from said vessel to any other vessel or to any wharf, pier, or bulkhead shall be withdrawn and removed.

SEC. 4. Before any such vessel as is described in section 1 of this ordinance, shall receive or discharge cargo or passengers between the hours of sunset and sunrise, the person in charge of such vessel shall so notify the health physician of the city of Galveston, and said health physician shall thereupon place a competent guard or watchman upon said vessel, whose duty it shall be to see that all of the provisions of this ordinance are complied with, and the said guard or watchman shall be paid for his services by the person in charge of vessel.

SEC. 5. By the term "any person in charge of any vessel" as used in this ordinance, is meant any person who as master or officer is in charge of and has authority over said vessel.

SEC. 6. Whenever the deck of any vessel berthed, moored, or docked at any wharf, pier, or bulkhead in the harbor of the city of Galveston shall get to be less than 7 feet above the surface of such wharf, pier, or bulkhead, then in that case said vessel shall be fended away from such pier, wharf, or bulkhead (except during stormy weather) a distance of not less than 4 feet by short floating spars fastened together; and in such case the rat guard or protector on each line, rope, or hawser, of such vessel shall be placed no more than 1 foot distant from said vessel.

SEC. 7. It shall be unlawful for any person in charge of any vessel to discharge or permit to be discharged from such vessel any freight, cargo, or passengers without maintaining a strict guard on all gangways, planks, or steps leading from said vessel to prevent the escape of rats from said vessel.

SEC. 8. It shall be unlawful for any person to unload or remove or permit to be unloaded or removed any crated cargo from any vessel in the harbor of the city of Galveston until said crated cargo shall have been carefully inspected to insure against rats being brought ashore in said cargo.

SEC. 9. Any person who shall violate any section of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than \$25 nor more than \$200.

SEC. 10. The ordinance regulating vessels having sailed from or having touched at a port infected or suspected of infection with bubonic plague and regulating the docking and berthing of such vessels and prescribing penalties as passed by the board of commissioners of the city of Galveston on July 25, 1912, is hereby repealed.

[Ordinance adopted Aug. 29, 1912.]

LOS ANGELES, CAL.

SMOKE, SOOT, ASHES, AND CINDERS—DISCHARGE OF, FROM FLUES, CHIMNEYS, AND SMOKESTACKS.

SECTION 1. That for the purpose of regulating the discharge of smoke from flues, chimneys, or smokestacks, or from any other structures or appliances from which smoke is discharged, and for the purpose of determining by a comparison the degree of darkness of smoke so discharged, a color scale for the measurement thereof is hereby adopted, as follows:

A white card, not less than 5 by 8 inches in size, shall be marked with black lines crossing each other at right angles. Each such line shall be 1 millimeter in width, and such lines shall be so placed that white spaces 9 millimeters square shall remain between such lines. When a test is being made, such card shall be placed at a distance of not more than 55 feet and not less than 45 feet from the observer and as nearly in line as possible between the eyes of the observer and the smoke concerning which the test is being made.

SEC. 2. It shall be unlawful for any person, firm, or corporation to cause, permit, or allow any smoke of a greater degree of darkness than the card described in section 1 hereof, when such card is placed at the said distance from the person observing such smoke, to issue or to be discharged from any flue, chimney, or smokestack, or from any other structure or appliance used for the discharge of smoke, or from which smoke is discharged, or from any works, plant, or factory, for a period longer than or for periods aggregating more than five minutes in any one hour of the day or night.

For the purposes of this section a works, plant, or factory shall be deemed to include all buildings and appliances and all flues, chimneys, and smokestacks connected therewith and all structures and appliances from which smoke is discharged, located upon any parcel of land which is held, used, or occupied in one body, whether the same contains one or more lots or tracts of land, if such buildings, structures, and appliances and such flues, chimneys, and smokestacks are owned or used or are intended to be used by the same person, firm, or corporation in or about the conduct of any business or occupation.

SEC. 3. It shall be unlawful for any person, firm, or corporation to cause, permit, or allow soot, ashes, or cinders to issue or to be discharged from any flue, chimney, or smokestack, or from any other structure or appliance.

SEC. 4. If any flue, chimney, smokestack, or other structure or appliance shall become so filled with soot as to become a menace to adjacent property, it shall be the duty of the person, firm, or corporation owning or using such flue, chimney, smokestack, or other structure or appliance to cause the same to be thoroughly cleaned, and it shall be unlawful for any such person, firm, or corporation to fail, refuse, or neglect so to do. Each such person, firm, or corporation shall be deemed guilty of a separate offense for every day during which such failure, refusal, or neglect continues and shall be punishable therefore as provided by this ordinance.

SEC. 5. It shall be unlawful for any person, firm, or corporation to erect, construct, or maintain, or to cause or permit to be erected, constructed, or maintained, any flue, chimney, or smokestack within 50 feet of any window of any adjacent building unless the top of such flue, chimney, or smokestack shall be higher than every portion of such window: *Provided, however,* That the provisions of this section shall not apply in any case where the owner of such adjacent building shall refuse to grant permission to brace such flue, chimney, or smokestack by means of wires attached to such building.

SEC. 6. The health commissioner, his assistants, deputies, and the officers and inspectors of the health department of the city of Los Angeles are hereby authorized to enter, during reasonable hours, upon any premises upon which is located any flue, chimney, or smokestack, or any other structure or appliance from which any smoke, soot, ashes, or cinders shall be discharged, for the purpose of making an examination as to the cause of the discharge of such smoke, soot, ashes, or cinders, and for the purpose of ascertaining the kind or character of fuel used, and the manner of using the same, and any other fact or facts showing compliance with or violation of this ordinance. Such officers and inspectors shall at least twice each month make a detailed report to said health commissioner of each such examination, which report shall show all facts ascertained by such examination.

SEC. 7. That any person, firm, or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punishable by a fine of not more than \$500, or by imprisonment in the city jail for a period of not more than six months, or by both such fine and imprisonment.

SEC. 8. That ordinance No. 21933 (new series), approved February 23, 1911, be, and the same is hereby, repealed: *Provided*, That any such repeal shall not affect or prevent the prosecution and punishment of any person, firm, or corporation for any act done or permitted in violation of any ordinance which may be repealed by this ordinance, and shall not affect any prosecution or action which may be pending in any court for the violation of any ordinance repealed by this ordinance.

[Ordinance No. 25038 adopted May 7, 1912.]

NEW ORLEANS, LA.

MILK—KEEPING OF HOGS AT DAIRIES PROHIBITED.

Be it resolved by the board of health of the city of New Orleans, That after 30 days from the promulgation of this resolution it shall be unlawful for any person or persons operating a dairy within the limits of the city of New Orleans to keep a hog or hogs in dairies or in or on the premises wherever a dairy is situated, and same shall be deemed a public nuisance;

Be it further resolved, That violation of this resolution shall be deemed and is a sufficient menace to public health to warrant the chairman of the board or any person authorized by him to take the necessary steps to close such dairy and to prevent the operation of a dairy on such premises.

[Resolution, board of health, adopted Apr. 9, 1912.]

REPORTS TO THE SURGEON GENERAL, UNITED STATES PUBLIC HEALTH SERVICE.

PLAGUE.

RECORD OF PLAGUE INFECTION.

Places.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
California:				
Cities—				
San Francisco.....	Jan. 30, 1908.....	Oct. 23, 1908.....	None.....	398 rats.
Oakland.....	Aug. 9, 1911.....	Dec. 1, 1908.....	do.....	126 rats.
Berkeley.....	Aug. 28, 1907.....	None.....	do.....	None.
Los Angeles.....	Aug. 11, 1908.....	do.....	Aug. 21, 1908.....	1 squirrel.
Counties—				
Alameda (exclusive of Oakland and Berkeley).	Sept. 24, 1909.....	Oct. 17, 1909; wood rat.	Sept. 10, 1912.....	260 squirrels; 1 wood rat.
Contra Costa.....	July 21, 1911.....	None.....	Oct. 8, 1912.....	1,120 squirrels.
Fresno.....	None.....	do.....	Oct. 27, 1911.....	1 squirrel.
Merced.....	do.....	do.....	July 12, 1911.....	5 squirrels.
Monterey.....	do.....	do.....	Aug. 6, 1911.....	6 squirrels.
San Benito.....	June 5, 1910.....	do.....	June 8, 1911.....	22 squirrels.
San Joaquin.....	Sept. 18, 1911.....	do.....	Aug. 26, 1911.....	18 squirrels.
San Luis Obispo.....	None.....	do.....	Jan. 29, 1910.....	1 squirrel.
Santa Clara.....	Aug. 31, 1910.....	do.....	Oct. 5, 1910.....	23 squirrels.
Santa Cruz.....	None.....	do.....	May 17, 1910.....	3 squirrels.
Stanislaus.....	do.....	do.....	June 2, 1911.....	13 squirrels.
Louisiana:				
City—				
New Orleans.....	do.....	July 27, 1912.....	None.....	1 rat.
Washington:				
City—				
Seattle.....	Oct. 30, 1907.....	Sept. 21, 1911.....	do.....	25 rats.

RATS COLLECTED AND EXAMINED FOR PLAGUE INFECTION.

Places.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
Cities—					
Berkeley.....	Nov. 9, 1912.....	.....	¹ 202.....	166.....	.....
Oakland.....	do.....	11.....	² 629.....	524.....	.....
San Francisco.....	do.....	19.....	³ 1,919.....	1,497.....	.....
Washington:					
City—					
Seattle.....	do.....	.....	1,040.....	995.....	.....

¹ Identified: *Mus norvegicus*, 176; *Mus musculus*, 26.

² Identified: *Mus norvegicus*, 553; *Mus musculus*, 76.

³ Identified: *Mus norvegicus*, 1,113; *Mus musculus*, 289; *Mus alexandrinus*, 235; *Mus rattus*, 282.

SQUIRRELS COLLECTED AND EXAMINED FOR PLAGUE INFECTION CALIFORNIA.

During the week ended November 9, 1912, there were examined for plague infection 42 ground squirrels from Santa Clara County, and 99 from San Joaquin County. No plague-infected squirrel was found.

CEREBROSPINAL MENINGITIS.

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES
FOR THE WEEK ENDED NOV. 9, 1912.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.....		2	Milwaukee, Wis.....	1	1
Boston, Mass.....	1	1	Nashville, Tenn.....		1
Buffalo, N. Y.....	1		New Orleans, La.....	1	
Chicago, Ill.....	7	1	New York, N. Y.....	3	1
Cincinnati, Ohio.....	1	1	Philadelphia, Pa.....	1	
Cleveland, Ohio.....	1	1	San Diego, Cal.....	1	1
Kansas City, Kans.....	1				

San Benito, Tex.

Acting Asst. Surg. Fairchild, at Brownsville, Tex., reports November 16, 1912, the occurrence of a case of cerebrospinal meningitis at San Benito, a small town in the vicinity of Brownsville, making about four cases which have occurred during the current year.

ERYSIPELAS.

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES
FOR THE WEEK ENDED NOV. 9, 1912.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Binghamton, N. Y.....	2		Passaic, N. J.....	1	
Brockton, Mass.....		1	Philadelphia, Pa.....	4	1
Buffalo, N. Y.....	1		St. Louis, Mo.....	2	
Cincinnati, Ohio.....	1		San Francisco, Cal.....	4	1
Erie, Pa.....	1		Wheeling, W. Va.....	1	
Los Angeles, Cal.....	1	1	Yonkers, N. Y.....		1
Milwaukee, Wis.....	3		York, Pa.....	1	
New York, N. Y.....	8	1			

PELLAGRA.

During the week ended November 9, 1912, 2 deaths from pellagra were reported by the health officer at New Orleans, La.

PNEUMONIA.

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES
FOR THE WEEK ENDED NOV. 9, 1912.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alameda, Cal.....	2	2	Columbus, Ind.....	1	1
Altoona, Pa.....		1	Cumberland, Md.....		1
Baltimore, Md.....		24	Danville, Ill.....		1
Bayonne, N. J.....		2	Dayton, Ohio.....		4
Berkeley, Cal.....		1	Elmira, N. Y.....		2
Binghamton, N. Y.....	1	5	Evansville, Ind.....		3
Boston, Mass.....		30	Everett, Mass.....		1
Braddock, Pa.....	1		Fall River, Mass.....		4
Bridgeport, Conn.....		1	Galesburg, Ill.....		2
Buffalo, N. Y.....	8		Hartford, Conn.....		3
Cambridge, Mass.....		1	Homestead, Pa.....		1
Chelsea, Mass.....		1	Houston, Tex.....		1
Chicago, Ill.....	24	72	Jersey City, N. J.....		10
Cincinnati, Ohio.....		8	Knoxville, Tenn.....		1
Cleveland, Ohio.....	23	7	Lawrence, Mass.....		2
Clinton, Mass.....		1	Lima, Ohio.....		1
Columbus, Ga.....		1	Logansport, Ind.....	1	1

PNEUMONIA—Continued.

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR
THE WEEK ENDED NOV. 9, 1912—Continued.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Los Angeles, Cal.		7	Pittsburgh, Pa.	21	45
Lowell, Mass.		2	Providence, R. I.		4
Lynchburg, Va.		1	Pawtucket, R. I.		2
Lynn, Mass.		1	Reading, Pa.	1	
Manchester, N. H.	3	3	Richmond, Va.		7
Marquette, Wis.		1	Rockford, Ill.		3
Melrose, Mass.		1	Sacramento, Cal.		2
Montclair, N. J.		1	San Francisco, Cal.	2	
Montgomery, Ala.		4	Schenectady, N. Y.		2
Mount Vernon, N. Y.	3		Seattle, Wash.		1
Nashville, Tenn.		1	South Bethlehem, Pa.	4	
Newark, N. J.		5	Springfield, Mass.		3
New Bedford, Mass.		3	Superior, Wis.		1
New Orleans, La.		3	Taunton, Mass.		1
Newton, Mass.		1	Toledo, Ohio		2
New York, N. Y.		89	Waltham, Mass.		2
Niagara Falls, N. Y.		2	Washington, D. C.		11
Oakland, Cal.		5	Wheeling, W. Va.		1
Oklahoma City, Okla.		2	Wilkes-Barre, Pa.	1	2
Omaha, Nebr.		3	Williamsport, Pa.		4
Passaic, N. J.		2	Wilmington, N. C.		2
Peoria, Ill.		2	Zanesville, Ohio.		2
Philadelphia, Pa.	17	26			

POLIOMYELITIS (INFANTILE PARALYSIS).

CASES AND DEATHS REPORTED BY CITY HEALTH AUTHORITIES FOR
THE WEEK ENDED NOV. 9, 1912.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Boston, Mass.	1	1	Northampton, Mass.	1	
Buffalo, N. Y.	3		Pittsburgh, Pa.	1	
Chicago, Ill.	5	1	Providence, R. I.	1	
Erie, Pa.	1		Sacramento, Cal.		1
Lowell, Mass.	1		Saginaw, Mich.		1
New York, N. Y.	7	1			

Indiana.

During the month of October, 1912, there were reported in Indiana 35 cases of poliomyelitis occurring in 14 counties as follows: Allen County, 2 cases; Boone County, 3 cases; Brown County, 1 case; Clinton County, 1 case; Delaware County, 1 case; Fulton County, 1 case; Hendricks County, 1 case; Hancock County, 1 case; Johnson County, 15 cases; Lake County, 2 cases; Madison County, 2 cases; Noble County, 1 case; Tippecanoe County, 1 case; Wells County, 3 cases.

During the same month 6 deaths from poliomyelitis were reported, occurring as follows: Franklin County, 1 death; Hendricks County, 1 death; Madison County, 2 deaths; Marion County, 1 death; Tippecanoe County, 1 death.

TETANUS.

During the week ended November 9, 1912, 1 case of tetanus was reported by the health officer of New Bedford, Mass.

SMALLPOX IN THE UNITED STATES.

CASES REPORTED DURING THE SECOND QUARTER OF 1912.

Information regarding the reported prevalence of smallpox during the second quarter of the current calendar year is available for the District of Columbia and the 31 States enumerated in the tables which follow. Cases of smallpox were notified in all the States reporting to the Surgeon General with the exception of Maryland. The reports from this State are exclusive of the city of Baltimore. However, the reports received from the commissioner of health of Baltimore show that no cases were reported in the city during the three months under consideration.

During the second three months of the year 1912 there were reported in the 31 States 5,734 cases of smallpox, with 53 deaths. More than half of the deaths occurred in Texas, where out of 118 reported cases 33 terminated fatally. Of these cases, 33, with 16 deaths, occurred in Tarrant County, in which is located the city of Fort Worth. The Tarrant County cases constituted an outbreak of virulent smallpox. Other virulent outbreaks occurred in Texas. The next greatest number of deaths occurred in Indiana, where there were 304 cases, with 5 deaths. Of these 5 deaths, 3 occurred among 11 cases in St. Joseph County, indicating that the infection there was of the virulent type. Four deaths were reported in Utah.

The disease was more prevalent in the New England States than usual, although by no means as prevalent there as in some other sections of the country. In the four New England States for which the information was available, namely, Connecticut, Maine, Massachusetts, and Vermont, there were in all 640 cases reported. Three of the cases in Maine terminated fatally. Of these 640 cases, 215 were in Maine, 41 in Vermont, 247 in Connecticut, and 137 in Massachusetts.

With the exception of the isolated outbreaks of virulent smallpox in Texas and Indiana, the disease was of the same mild type that has been so generally prevalent throughout the United States during the last 14 years. In Minnesota there were 641 cases without a death. Other States also had a considerable number of cases without any recorded deaths. Illinois had 328 cases without a reported death, North Carolina 311 cases, Washington 274, Ohio 207, Oklahoma 202, Connecticut 247, and Wisconsin 167.

As stated above, no case of smallpox was reported in Maryland during the three months under review. The other States with the fewest reported cases were the District of Columbia with 1 case, New Jersey with 3, Arizona with 4, Wyoming with 17, Vermont with 41, Montana 59, North Dakota 68, and Kansas 76.

Smallpox was also present in the States not enumerated in the table, but information regarding the number of cases occurring has not been available.

During the first quarter of 1912 there were reported 8,850 cases of smallpox with 81 deaths.¹

¹For smallpox reported during the first quarter of 1912, see Public Health Reports of July 26, 1912, pp. 1198-1209.

SMALLPOX IN THE UNITED STATES—Continued.

Smallpox Reported During April, May, and June, 1912—Occurrence of Cases by States and Counties.

	April.		May.		June.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Arizona:								
Counties—								
Cochise.....			1				1	
Maricopa.....			2				2	
Yuma.....					1		1	
Total.....			3		1		4	
California:								
Counties—								
Alameda.....	1		2		1		4	
Butte.....	32		11		19		62	
Colusa.....					10		10	
Contra Costa.....	1				4		5	
Fresno.....	7				1		8	
Los Angeles.....	8		13		30		51	
Marin.....	2						2	
Modoc.....			2				2	
Napa.....					1		1	
Orange.....	1						1	
Placer.....			3				3	
Riverside.....					5		5	
Sacramento.....	6		16		2		24	
San Bernardino.....	5	1	2				7	1
San Diego.....	8		1		4		13	
San Francisco.....			4		29		33	
San Luis Obispo.....	1						1	
Shasta.....			2				2	
Sutter.....					1		1	
Tulare.....	4		6		4		14	
Ventura.....			1				1	
Total.....	76	1	63		111		250	1
Colorado:								
Counties—								
Archuleta.....	6		3		3		12	
Boulder.....	15		6				21	
Denver.....	7		17		8		32	
Fremont.....					1		1	
Larimer.....			1				1	
Las Animas.....	6		1				7	
Lincoln.....	1		2				3	
Mesa.....					1		1	
Moffat.....					1		1	
Montrose.....	3				3		6	
Otero.....	1						1	
Pueblo.....	1						1	
Washington.....	14		17				31	
Weid.....	6		4		11		21	
Total.....	60		51		28		139	
Connecticut:								
Counties—								
Fairfield.....	1						1	
Litchfield.....			4				4	
New Haven.....	97		39		9		145	
New London.....			1				1	
Tolland.....					1		1	
Windham.....	40		28		27		95	
Total.....	138		72		37		247	
District Columbia.....	1						1	
Florida:								
Counties—								
Alachua.....	2						2	
Brevard.....	3						3	
Citrus.....					1		1	
Duval.....	12	1	11				23	1

¹ The Florida cases were reported to the bureau by weeks, and therefore the division of the cases by months is only approximate. The cases assigned to April were reported for the period Mar. 31-Apr. 29; those assigned to May were reported for the period Apr. 30-May 26; those assigned to June were reported for the period May 27-June 30.

SMALLPOX IN THE UNITED STATES—Continued.

Smallpox Reported During April, May, and June, 1912—Occurrence of Cases by States and Counties—Continued.

	April.		May.		June.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Florida—Continued.								
Counties—Continued.								
Escambia.....	10		9		1		20	
Franklin.....			3		4		7	
Hernando.....	2				10		12	
Hillsboro.....	15				13		28	
Jackson.....	59						59	
Leon.....	3						3	
Madison.....			1				1	
Nassau.....	1						1	
Orange.....			4				4	
Polk.....	7						7	
Putnam.....	21		1		15		37	
St. Lucie.....					1		1	
Sumter.....	1				10		11	
Volusia.....	2		2	1	4		8	1
Total.....	138	1	31	1	59		228	2
Illinois:								
Counties—								
Adams.....			10		4		14	
Alexander.....					2		2	
Bond.....	2		6		14		22	
Boone.....	2						2	
Bureau.....	12		1				13	
Champaign.....			2		14		16	
Clinton.....					7		7	
Cook.....	16		17				33	
Crawford.....	1						1	
Dekalb.....	1						1	
Fulton.....			1		1		2	
Henderson.....					6		6	
Henry.....	12		14		3		29	
Jefferson.....	1		6				7	
Kane.....	12		1				13	
Lasalle.....	24		14		19		57	
Lawrence.....	1		3				4	
McDonough.....	2				1		3	
Macon.....					3		3	
McLean.....	2						2	
Madison.....	1		9				10	
Marion.....	1				1		2	
Menard.....			30				30	
Randolph.....	2		6				8	
Rock Island.....							1	
St. Clair.....	5		7		5		17	
Saline.....			2		2		4	
Sangamon.....	2		5				7	
Stephenson.....	1						1	
Vermilion.....	1				1		2	
Villages—								
Swan Township.....	5						5	
Taylor Springs.....	3						3	
Total.....	109		136		83		328	
Indiana:								
Counties—								
Bartholomew.....	30	1	7				37	1
Brown.....	1				7		8	
Cass.....	1						1	
Clark.....	19		13				32	
Davies.....	2						2	
Dearborn.....	1		1				2	
Decatur.....	3						3	
Delaware.....	4		3		1		8	
Fayette.....								
Gibson.....	17		5		5		27	
Grant.....	3					1	3	
Greene.....	1		1				2	
Howard.....	2				6		8	
Johnson.....	9		15		1		25	
Knox.....	3						3	
Laporte.....			1		2		3	

SMALLPOX IN THE UNITED STATES—Continued.

Smallpox Reported During April, May, and June, 1912—Occurrence of Cases by States and Counties.

	April.		May.		June.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Indiana—Continued.								
Counties—Continued.								
Madison.....	4		1		3		8	
Marion.....	2		6		44		52	
Miami.....			1				1	
Morgan.....			1				1	
Pike.....	2		9		7		18	
Randolph.....	1		1				2	
Ripley.....					1		1	
St. Joseph.....	9	1	1		1	2	11	3
Shelby.....					4		4	
Sullivan.....	11		2				13	
Tipton.....					1		1	
Vanderburg.....	5		1		6		12	
Vigo.....	2						2	
Wabash.....	2		2		1		5	
Warrick.....					1		1	
Wayne.....	3						3	
Total.....	141	2	72		91	3	304	5
Iowa:								
Counties—								
Appanoose.....	17		2				19	
Boone.....	1						1	
Buena Vista.....					1		1	
Butler.....	6		5		1		12	
Carroll.....			1				1	
Cerro Gordo.....	2		2				4	
Cherokee.....					24		24	
Clay.....			1				1	
Davis.....			2				2	
Emmet.....	1						1	
Hancock.....			1				1	
Harrison.....	2						2	
Howard.....					3		3	
Jasper.....					1		1	
Kossuth.....			1				1	
Linn.....	1		22		4		27	
Montgomery.....	1						1	
Pocahontas.....	1						1	
Polk.....			3				3	
Pottawattamie.....			11		4	1	15	1
Sac.....			8		2		10	
Scott.....	2						2	
Story.....					1		1	
Wayne.....			3				3	
Worth.....	4		4				8	
Wright.....	3				1		4	
Total.....	41		66		42	1	149	1
Kansas:								
Counties—								
Allen.....			1		9		10	
Brown.....	1						1	
Chase.....			6		6		12	
Chautauqua.....			1				1	
Clay.....	5						5	
Cowley.....			1		1		2	
Finney.....			2		4		6	
Jewell.....			1				1	
Leavenworth.....	1		1		1		3	
Lyon.....	15		6		1		22	
Montgomery.....			1				1	
Morton.....					2		2	
Sedgwick.....					1		1	
Shawnee.....			1		2		3	
Wyandotte.....			3		3		6	
Total.....	22		24		30		76	

SMALLPOX IN THE UNITED STATES—Continued.

Smallpox Reported During April, May, and June, 1912—Occurrence of Cases by States and Counties.

	April.		May.		June.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Maine:								
Counties—								
Androscoggin.....	32	3	4		6		42	3
Aroostook.....			22		9		31	
Franklin.....	12		3				15	
Kennebec.....	3				55		58	
Lincoln.....					3		3	
Oxford.....			3		5		8	
Penobscot.....	7						7	
Piscataquis.....	4		2		3		9	
Sagadahoc.....					3		9	
Somerset.....	15		9		5		29	
York.....			4		2		6	
Township 17, county not given.....					5		5	
Total.....	75	3	47		93		215	3
Maryland, exclusive of Baltimore.....								
Massachusetts:								
Counties—								
Bristol.....	1				2		3	
Essex.....	98		7		5		110	
Franklin.....			3		16		19	
Hampden.....					1		1	
Middlesex.....	1		1				2	
Suffolk.....			2				2	
Total.....	100		13		24		137	
Michigan:								
Counties—								
Allegan.....	2		3		12		17	
Barry.....	7						7	
Berrien.....	3						3	
Branch.....			1		2		2	
Cass.....	1		1		2		4	
Chippewa.....	1		3				4	
Eaton.....					1		1	
Hillsdale.....	3		2				5	
Jackson.....	1		1				2	
Kalamazoo.....	16						16	
Macinac.....	1						1	
Monroe.....					9		9	
Montcalm.....	3		1				4	
Muskegon.....					2		2	
Saginaw.....			1				1	
St. Clair.....	4		1				5	
St. Joseph.....			1				1	
Shiawassee.....					1		1	
Van Buren.....					23		23	
Wayne.....	4		8		8		20	
Total.....	46		27		60		133	
Minnesota:²								
Counties—								
Aitkin.....					2		2	
Anoka.....	2						2	
Becker.....			1				1	
Bigstone.....	1						1	
Carlton.....	4		4		2		10	
Chippewa.....	1		2				3	
Crow Wing.....					2		2	
Dakota.....	8		1		1		10	
Dodge.....	3		5		1		9	
Filmore.....	3				1		4	
Grant.....			6				6	
Hennepin.....	67		1		83		151	
Isanti.....			2				2	

¹ The location of these 5 cases was not given by counties.² The Minnesota cases were reported to the bureau by weeks. The assignment of the cases to calendar months is therefore only approximate. The cases assigned to April were reported for the period Apr. 2-29, inclusive; those assigned to May were for the period Apr. 30-May 27; those to June were for the period May 28-July 1.

SMALLPOX IN THE UNITED STATES—Continued.

Smallpox Reported During April, May, and June, 1912—Occurrence of Cases by States and Counties.

	April.		May.		June.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Minnesota—Continued.								
Counties—Continued.								
Lac qui Parle.....	1				2		3	
Lincoln.....					1		1	
Lyon.....			1				1	
McLeod.....			1				1	
Marshall.....	8						9	
Mower.....	1		53		15		69	
Olmstead.....	1		2				3	
Ottertail.....	16				17		33	
Polk.....					1		1	
Ramsey.....	59		45		134		238	
Red Lake.....					1		1	
Renville.....	16						25	
Rice.....	6		4		8		18	
St. Louis.....			1		4		5	
Swift.....	1		1		1		3	
Todd.....	2						2	
Traverse.....			5		3		8	
Wabasha.....	1						1	
Washington.....	1				1		2	
Winona.....	5		1		2		8	
Yellow Medicine.....	6						6	
Total.....	213		146		282		641	
Montana:								
Counties—								
Cascade.....			1				1	
Chouteau.....	3						3	
Dawson.....	1						1	
Fergus.....	2		2				4	
Lewis and Clark.....	1		1				2	
Meagher.....	3		11		1		15	
Musselshell.....	8		1				9	
Silverbow.....	1		7		4		12	
Valley.....	10		2				12	
Total.....	29		25		5		59	
New Jersey:								
Counties—								
Essex.....	1	1					1	1
Middlesex.....			1				1	
Warren.....					1	1	1	1
Total.....	1	1	1		1	1	3	2
New York:								
Counties—								
Allegany.....			1				1	
Broome.....	4		10		7		21	
Cattaraugus.....	11		8		3		22	
Chautauqua.....	1		4				5	
Chenango.....			1				1	
Clinton.....					2		2	
Cortland.....	1						1	
Erie.....	1		4		2		7	
Franklin.....					1		1	
Monroe.....	1						1	
New York.....							1	
Niagara.....	9		10		5		24	
Ontario.....	2						2	
Orange.....			1				1	
Rockland.....					1		1	
Steuben.....	2		1				3	
Wayne.....			1				1	
Westchester.....					3		3	
Total.....	33		41		24		98	

SMALLPOX IN THE UNITED STATES—Continued.

Smallpox Reported During April, May, and June, 1912—Occurrence of Cases by States and Counties.

	April.		May.		June.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
North Carolina:								
Counties—								
Anson.....	36						36	
Beaufort.....	5		4		1		10	
Buncombe.....	2		4		7		13	
Cabarrus.....			2				2	
Caldwell.....	4						4	
Carteret.....	3		1				4	
Catawba.....					2		2	
Craven.....	14		3		11		28	
Cumberland.....	3		1				4	
Duplin.....	4						4	
Durham.....			3				3	
Edgecombe.....					1		1	
Franklin.....			1				1	
Gates.....	2						2	
Granville.....	4		4		4		12	
Greene.....					1		1	
Guilford.....			1				1	
Harnett.....					1		1	
Hertford.....	1						1	
Johnston.....	2		1		1		4	
Lenoir.....			1				1	
Lincoln.....	11		3		4		18	
McDowell.....					3		3	
Madison.....	24		12		13		49	
Mecklenburg.....			3				3	
Montgomery.....			6				6	
New Hanover.....	13						13	
Pender.....	3		1		9		13	
Robeson.....	8		14		3		25	
Swain.....	1						1	
Tyrrell.....			10		3		13	
Union.....					3		3	
Wake.....	1		1				2	
Warren.....	4		1		10		15	
Wayne.....					2		2	
Yancey.....			4		6		10	
Total.....	145		81		85		311	
North Dakota:								
Counties—								
Barnes.....			3		3		6	
Benson.....	5						5	
Bottineau.....	2		12		12		26	
Burleigh.....					13		13	
Cass.....	1		1		2		4	
Foster.....					1		1	
Grand Forks.....	5		1		3		9	
Lamoure.....	2						2	
Oliver.....					2		2	
Total.....	15		17		36		68	
Ohio:								
Counties—								
Athens.....	40		3				43	
Columbiana.....	1		1				2	
Cuayahoga.....			1				1	
Franklin.....			9				9	
Hamilton.....	3		1		2		6	
Hancock.....	1		4				5	
Hocking.....			2				2	
Jackson.....					8		8	
Lucas.....			2				2	
Madison.....	3						3	
Miami.....	1		1		1		3	
Montgomery.....	108		9		1		118	
Paulding.....	1						1	
Portage.....	1						1	
Seneca.....					3		3	
Total.....	159		33		15		207	

SMALLPOX IN THE UNITED STATES—Continued.

Smallpox Reported During April, May, and June, 1912—Occurrence of Cases by States and Counties.

	April.		May.		June.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Oklahoma: ¹								
Counties—								
Beaver.....	28				1		29	
Beckham.....	5						5	
Canadian.....	42		84		1		127	
Delaware.....	2		6				6	
Dewey.....			2				2	
Grant.....	2						2	
Hughes.....	5						5	
Kay.....	2						2	
Kiowa.....	2						2	
Le Flore.....					1		1	
Oklahoma.....	1						1	
Oklmulgee.....			1				1	
Rogers.....	5		5				10	
Stephens.....	3						3	
Tulsa.....	1				1		1	
Woodward.....			2		1		3	
Total.....	98		100		4		202	
Oregon:								
Counties—								
Baker.....	2		3		1		6	
Columbia.....	2		1				3	
Crook.....					5		5	
Grant.....			1				1	
Harney.....			14		6		20	
Hood River.....			2				2	
Jackson.....			2				2	
Lane.....	1		1				2	
Linn.....	1						1	
Marion.....	4		6		7		17	
Multnomah.....	25		40		34		99	
Polk.....	1						1	
Sherman.....					4		4	
Umatilla.....			4				4	
Union.....	3		5		1		9	
Washington.....	1				2		3	
Total.....	40		79		60		179	
Pennsylvania: ²	51		23		47		121	
South Dakota:								
Counties—								
Aurora.....			3		2		5	
Bonhomme.....					2		2	
Brown.....	18		15		8		41	
Charles Mix.....	3		2				5	
Clark.....	3		9				12	
Clay.....	4						4	
Coddington.....			1		4		5	
Day.....	1						1	
Fall River.....					1		1	
Hand.....	1						1	
Hughes.....					2		2	
McCook.....			1				1	
Marshall.....	8		3				11	
Minnehaha.....	1						1	
Moody.....	1						1	
Roberts.....	1		5				6	
Spink.....	3		8				11	
Union.....			1				1	
Walworth.....					7		7	
Yankton.....					1		1	
Total.....	44		48		27		119	

¹ In January there were 184 cases, in February 64 cases, and in March 74 cases.² Distribution of cases not given by counties in reports received from Pennsylvania.

SMALLPOX IN THE UNITED STATES—Continued.

Smallpox Reported During April, May, and June, 1912—Occurrence of Cases by States and Counties.

	April.		May.		June.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Texas.....		8				6		¹ 14
Counties—								
Bee.....	1						1	
Dallas.....			2	1			2	1
Goliad.....			4				4	
Gonzales.....	1		1				2	
Nueces.....			1				1	
Refugio.....	1		16				17	
Tarrant.....	31	14	2	2			33	16
Travis.....			3				3	
Upshur.....	3						3	
Valverde.....			30	1	3	1	33	2
Wichita.....					1		1	
Wood.....			18				18	
Total.....	37	22	77	4	4	7	118	33
Utah:								
Counties—								
Beaver.....	10		17		8		35	
Boxelder.....			2		5		7	
Cache.....	26		12				38	
Carbon.....			10		5		15	
Davis.....	23		20		1		44	
Emery.....	15		1				16	
Juab.....	1		1				1	
Millard.....					1		1	
Salt Lake.....	103		100	1	78		281	1
Sanpete.....	2						2	
Sevier.....			6		8		14	
Tooele.....	6		4		4		14	
Utah.....	25		26		48	1	99	1
Wasatch.....	9		8		1	1	18	1
Washington.....			1		2		3	
Weber.....	47		22	1	16		85	1
Total.....	267		220	2	177	2	673	4
Vermont:								
Counties—								
Caledonia.....	9						9	
Chittenden.....			4				4	
Lamoille.....	1				6		7	
Orange.....	1						1	
Washington.....			2				2	
Windsor.....	13		5				18	
Total.....	24		11		6		41	
Virginia:								
Counties—								
Albemarle.....			6				6	
Appomattox.....	2						2	
Brunswick.....			2		12		14	
Buchanan.....			2				2	
Chesterfield.....	2				1		3	
Dinwiddie.....	4		1				5	
Goochland.....			1				1	
Grayson.....					3		3	
Greene.....	1						1	
Hoover.....					3		3	
Henrico.....	3		5		14	1	22	1
Lancaster.....					2		2	
Lee.....	1				1		2	
Mecklenburg.....	13		4		14		31	
Norfolk.....	15		22		13		50	
Northampton.....			1				1	
Russell.....	4		3		9		16	
Scott.....	6		1				7	
Smyth.....			9				9	
Southampton.....	2		3				5	
Wise.....	41						41	
Total.....	94		60		72	1	226	1

¹ Distribution not given by counties.

SMALLPOX IN THE UNITED STATES—Continued.

Smallpox Reported During April, May, and June, 1912—Occurrence of Cases by States and Counties.

	April.		May.		June.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Washington:								
Counties—								
Chelan.....			10				10	
Clark.....	3						3	
Columbia.....	1						1	
Douglas.....	1		2				3	
Ferry.....			1		2		3	
Grant.....	10						10	
Island.....					1		1	
King.....			13		1		14	
Kittitas.....			3		10		13	
Klickitat.....			2				2	
Lewis.....					2		2	
Lincoln.....	4						4	
Mason.....			15				15	
Okanogan.....					8		8	
Pend Oreille.....			1				1	
Pierce.....	6		13		4		23	
Snohomish.....			14				14	
Spokane.....	10		33		26		69	
Stevens.....	25		3				28	
Thurston.....	1		1		1		3	
Whatecom.....	1		1		1		3	
Whitman.....			15		4		19	
Yakima.....	1		6		18		25	
Total.....	63		133		78		274	
Wisconsin:								
Counties—								
Adams.....	1						1	
Barron.....	1						1	
Brown.....	1						1	
Buffalo.....	3		11		1		15	
Burnett.....	1						1	
Chippewa.....					1		1	
Clark.....			1				1	
Columbia.....	1						1	
Dane.....	6		1		1		8	
Douglas.....	1						1	
Fond du Lac.....			2				2	
Green Lake.....	1		1				2	
Jackson.....	11						11	
Jefferson.....	3		2		7		12	
La Crosse.....	2		2		1		5	
Manitowoc.....			2				2	
Marathon.....	2		6				8	
Marinette.....	9						9	
Milwaukee.....	4		7				11	
Monroe.....	1		14		8		23	
Pierce.....	1						1	
Polk.....					6		6	
Portage.....	1						1	
Sauk.....			4				4	
Sheboygan.....			1				1	
Trempealeau.....	1		5		17		23	
Vernon.....			3				3	
Walworth.....	1						1	
Waukesha.....			1				1	
Waupaca.....			1				1	
Waushara.....	3		2				5	
Winnebago.....	1						1	
Wood.....	1				2		3	
Total.....	57		66		44		167	
Wyoming:								
Counties—								
Albany.....	5						5	
Carbon.....	2						2	
Natrona.....			1	1			1	1
Sheridan.....	1		4		1		6	
Sweetwater.....			3				3	
Total.....	8		8	1	1		17	1

SMALLPOX IN THE UNITED STATES—Continued.

Smallpox Reported During April, May, and June, 1912—Summary of States.

	April.		May.		June		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Arizona.....			3		1		4	
California.....	76	1	63		111		250	1
Colorado.....	60		51		28		139	
Connecticut.....	138		72		37		247	
District of Columbia.....	1						1	
Florida.....	138	1	31	1	59		228	2
Illinois.....	109		136		83		328	
Indiana.....	141	2	72		91	3	304	5
Iowa.....	41		66		42	1	149	1
Kansas.....	22		24		30		76	
Maine.....	75	3	47		93		215	3
Maryland (exclusive of the city of Baltimore).....								
Massachusetts.....	100		13		24		137	
Michigan.....	46		27		60		133	
Minnesota.....	213		146		282		641	
Montana.....	29		25		5		59	
New Jersey.....	1	1	1		1	1	3	2
New York.....	33		41		24		98	
North Carolina.....	145		81		85		311	
North Dakota.....	15		17		36		68	
Ohio.....	159		33		15		207	
Oklahoma.....	98		100		4		202	
Oregon.....	40		79		60		179	
Pennsylvania.....	51		23		47		121	
South Dakota.....	44		48		27		119	
Texas.....	37	22	77		4		118	33
Utah.....	267		229	2	177	2	673	4
Vermont.....	24		11		6		41	
Virginia.....	94		60		72	1	226	1
Washington.....	63		133		78		274	
Wisconsin.....	57		66		44		167	
Wyoming.....	8		8	1	1		17	1
Grand total.....	2,325	30	1,783	8	1,627	15	5,735	53

STATE REPORTS (CURRENT).

This table is compiled from reports made to the Bureau of the United States Public Health Service by the health authorities of certain States and shows the number of cases of smallpox notified to the authorities in these States.

The following States report monthly: Arizona, California, Colorado, Connecticut, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, New Jersey, New York, North Carolina, North Dakota, Oklahoma, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Utah, Vermont, Virginia, Washington, Wisconsin, and Wyoming.

Florida and the District of Columbia report by weeks.

All the above-named States give the geographic distribution of reported cases by counties, with the exception of Pennsylvania, which gives the total number reported in the State without specifying the localities in which they occurred.

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received During Week Ended Nov. 29, 1912.

Places.	Date.	Cases.	Deaths.	Remarks.
Florida.....	Sept. 30-Nov. 17..	.....	.....	No case.
Illinois:				
Counties—				
Bureau.....	Oct. 1-31.....	4	.....
Cook.....	do.....	2	.....
Dekalb.....	do.....	2	.....
Gallatin.....	do.....	1	.....
La Salle.....	do.....	36	.....
Peoria.....	do.....	1	.....
Vermilion.....	do.....	2	.....
Total.....		48	.....
Indiana:				
Counties—				
Grant.....	Oct. 1-31.....	8	.....
Greene.....	do.....	3	1	
Johnson.....	do.....	21	.....
Knox.....	do.....	2	.....
Lake.....	do.....	1	.....
Pike.....	do.....	1	.....
Posey.....	do.....	4	.....
Vanderburg.....	do.....	11	.....
Vigo.....	do.....	1	.....
Total.....		52	1	
Montana:				
Counties—				
Custer.....	Oct. 1-31.....	2	.....
Powell.....	do.....	2	.....
Silverbow.....	do.....	4	.....
Total.....		8	.....
North Carolina:				
Counties—				
Beaufort.....	Oct. 1-31.....	1	.....
Buncombe.....	do.....	8	.....
Burke.....	do.....	3	.....
Caldwell.....	do.....	2	.....
Edgecombe.....	do.....	4	.....
Granville.....	do.....	1	.....
Guilford.....	do.....	1	.....
Hoke.....	do.....	1	.....
Lee.....	do.....	1	.....
Macon.....	do.....	1	.....
Madison.....	do.....	18	.....
Mecklenburg.....	do.....	4	.....
New Hanover.....	do.....	4	.....
Robeson.....	do.....	4	.....
Rowan.....	do.....	3	.....
Wayne.....	do.....	1	.....
Total.....		57	.....
Texas:				
Counties—				
Cooke.....	Oct. 1-31.....	1	.....
Denton.....	do.....	2	.....
Lavaca.....	do.....	4	.....
Orange.....	do.....	1	.....
Total.....		8	.....
Washington:				
Counties—				
Adams.....	Sept. 1-30.....	3	.....
Asotin.....	do.....	15	.....
Douglas.....	do.....	1	.....
Kittitas.....	do.....	2	.....
Lewis.....	do.....	1	.....
Snohomish.....	do.....	1	.....
Spokane.....	do.....	12	.....
Whitman.....	do.....	4	.....
Yakima.....	do.....	6	.....
Total.....		45	.....

SMALLPOX IN THE UNITED STATES—Continued.

Reports Received During Week Ended Nov. 29, 1912.

Places.	Date.	Cases.	Deaths.	Remarks.
Wisconsin:				
Counties—				
Adams.....	Sept. 1-30.....	1		
Brown.....	do.....	1		
Buffalo.....	do.....	1		
Dane.....	do.....	6	1	
Douglas.....	do.....	1		
Jefferson.....	do.....	2		
La Crosse.....	do.....	1		
Racine.....	do.....	1		
St. Croix.....	do.....	1		
Shawano.....	do.....	3		
Waushara.....	do.....	1		
Total.....		19	1	

CITY REPORTS (CURRENT).

Cases and Deaths Reported by City Health Authorities for the Week Ended Nov. 9, 1912.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Danville, Ill.....	1		La Crosse, Wis.....	6	
Detroit, Mich.....	3		Manchester, N. H.....	1	
Cincinnati, Ohio.....	1		New York, N. Y.....	1	
Cleveland, Ohio.....		1	Pittsburgh, Pa.....	1	
Evansville, Ind.....	3		Richmond, Va.....	1	
Kansas City, Kans.....	1		San Francisco, Cal.....	2	
Knoxville, Tenn.....	3		Spokane, Wash.....	3	

MORBIDITY AND MORTALITY.

MORBIDITY AND MORTALITY TABLE FOR CERTAIN DISEASES, CITIES OF THE UNITED STATES, FOR WEEK ENDED NOV. 9, 1912.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tubercu- losis.		Typhoid fever.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cities having over 500,000 inhabitants.												
Baltimore, Md.....	558,485	200	41	4	4	.....	24	.....	19	26	19	3
Boston, Mass.....	670,585	223	42	.....	48	1	28	.....	60	14	7	2
Chicago, Ill.....	2,185,283	572	211	24	93	1	158	14	113	53	21	4
Cleveland, Ohio.....	560,663	147	111	5	13	1	33	.....	29	6	7	.....
New York, N. Y.....	4,796,883	1,302	292	17	128	1	114	3	364	135	52	14
Philadelphia, Pa.....	1,549,008	430	79	9	56	1	81	2	58	51	10	1
Pittsburgh, Pa.....	533,905	200	68	6	146	3	37	7	16	13	5	1
St. Louis, Mo.....	687,029	181	81	3	41	.....	25	.....	19	12	16	2
Cities having from 300,000 to 500,000 inhabitants.												
Buffalo, N. Y.....	423,715	125	16	2	144	.....	5	.....	22	17	.....	1
Cincinnati, Ohio.....	364,463	128	24	3	127	3	22	.....	25	15	7	.....
Detroit, Mich.....	465,766	170	65	4	.....	.....	10	.....	.....	.....	.....	.....
Los Angeles, Cal.....	319,198	124	11	1	.....	.....	18	.....	34	24	7	1
Milwaukee, Wis.....	373,857	94	39	6	2	.....	9	.....	20	11	4	.....
Newark, N. J.....	347,469	90	37	1	5	.....	14	.....	22	8	3	.....
New Orleans, La.....	339,075	130	44	2	1	.....	4	.....	28	19	7	3
San Francisco, Cal.....	416,912	137	4	.....	7	.....	5	.....	29	6	6	1
Washington, D. C.....	331,069	104	17	.....	.....	.....	6	.....	25	12	15	1
Cities having from 200,000 to 300,000 inhabitants.												
Jersey City, N. J.....	267,779	76	.....	1	.....	.....	.....	.....	3	.....	.....	1
Providence, R. I.....	224,326	75	23	1	4	1	10	.....	5	7	2	.....
Seattle, Wash.....	237,194	29	5	.....	4	.....	2	.....	2	2	3	.....

MORBIDITY AND MORTALITY—Continued.

Morbidity and mortality table for certain diseases, cities of the United States, for week ended Nov. 9, 1912—Continued.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tubercu- losis.		Typhoid fever.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cities having from 100,000 to 200,000 inhabitants.												
Bridgeport, Conn.	102,054	33	4				1	2	3	3	1	
Cambridge, Mass.	104,839	33	3		1		4		6	3	1	
Dayton, Ohio	116,577		25	2			1		1	2		
Fall River, Mass.	119,295	39	5	1			3	1	3	2	4	
Grand Rapids, Mich.	112,571	21	4						1	2	7	
Lowell, Mass.	106,294	30	1		19		21		2	2	1	
Nashville, Tenn.	110,364	37	3	1			5		1	2	5	1
Oakland, Cal.	150,174	44	3				2		2	8	5	
Omaha, Nebr.	124,096	22			2						3	1
Richmond, Va.	127,628	53	8		2		23		4	7	2	
Spokane, Wash.	104,402				2		5			2		
Toledo, Ohio.	168,497	48	17	3	21		13		3	3	19	2
Worcester, Mass.	145,986	43	8				7		7	3	3	
Cities having from 50,000 to 100,000 inhabitants.												
Altoona, Pa.	52,127	9	4				6	1				
Bayonne, N. J.	55,545	19	5	1	2		4		1			
Brockton, Mass.	56,878	13	2						2	2	3	
Camden, N. J.	94,538		18	2	2				2		1	
Elizabeth, N. J.	73,409	22	2		10		3	1	1	4	2	
Erie, Pa.	66,525	9	9				4		3	2	2	
Evansville, Ind.	69,647	18	15				5		2	4	1	
Harrisburg, Pa.	64,186	20	9	1	1				2			
Hartford, Conn.	98,915	30	5		8		22	3	6	1	6	
Hoboken, N. J.	70,324		9		1		1		7	1		
Houston, Tex.	78,800	27					3			3		1
Johnstown, Pa.	55,482	19	30	3			2					
Kansas City, Kans.	82,331	5			2							
Lawrence, Mass.	85,892		3	1	2				3	3		
Lynn, Mass.	89,336	15	3		1		3		2	2		
Manchester, N. H.	70,063	23	5	2			1		1	1		
New Bedford, Mass.	96,652	35	4		3		3		7	4	1	1
Oklahoma City, Okla.	64,205	12	1							1	1	1
Passaic, N. J.	54,773	11	2		8		4		2		1	1
Pawtucket, R. I.	51,622		2									
Peoria, Ill.	66,950	12	3		1					1		1
Reading, Pa.	96,071	24	7		1		2		1	1	1	
Saginaw, Mich.	50,510	11	7		9		4		1	3		
Schenectady, N. Y.	72,826	11	2				1		4		1	
South Bend, Ind.	53,684	17	1	1						5		
Springfield, Mass.	88,926	31	2				2		3	1	2	
Trenton, N. J.	96,815	27	4	1			1		8	3	4	
Wilkes-Barre, Pa.	67,105	17	5		1		4		4		1	1
Yonkers, N. Y.	79,803	26	5	1	1		2		3	2		
Cities having from 25,000 to 50,000 inhabitants.												
Atlantic City, N. J.	46,150	9	2				3		1			
Auburn, N. Y.	34,668	6									1	
Aurora, Ill.	29,807	6	2									
Berkeley, Cal.	40,434	10			2				3	1	1	
Binghamton, N. Y.	48,443	17			1		1		5	2	4	
Brookline, Mass.	27,792	1	3									
Chattanooga, Tenn.	44,604						2				1	
Chelsea, Mass.	32,452	7	4		1		1		2	1		
Chicopee, Mass.	25,401	4			4		1	1		1		
Danville, Ill.	27,871	8	4				4					
East Orange, N. J.	34,371		2				1	1	3	2	1	
Elmira, N. Y.	37,176	12	2								1	
Everett, Mass.	33,484	3										
Fitchburg, Mass.	37,826	6	1		16		2		2	1	1	
Haverhill, Mass.	44,115	12	5	1			3		3	1		1
Knoxville, Tenn.	36,346	9	1		1					1		
La Crosse, Wis.	30,417	4										
Lancaster, Pa.	47,227		3		1		4		1		1	
Lexington, Ky.	35,099	8	3							1		
Lima, Ohio.	30,508	3	5		1							

MORBIDITY AND MORTALITY—Continued.

Morbidity and mortality table for certain diseases, cities of the United States, for week ended Nov. 9, 1912—Continued.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.		Typhoid fever.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Cities having from 25,000 to 50,000 inhabitants—Con.</i>												
Lynchburg, Va.	29,494	10			1		6		2	1	2	
Montgomery, Ala.	38,136	18	1				1			2	2	
Mount Vernon, N. Y.	30,919		1		2				1			
New Castle, Pa.	36,280		5				2		3		3	
Newport, Ky.	30,309	7	4				5		1	1		
Newton, Mass.	39,806	7			1		1				1	
Niagara Falls, N. Y.	30,445	12	1		4		2	1				1
Norristown, Pa.	27,875	6	2	1							2	
Orange, N. J.	29,630	6			2		2			1	1	
Pasadena, Cal.	30,291	9							1	3		
Pittsfield, Mass.	32,121	10	3				3			2	2	
Portsmouth, Va.	33,190	10	9				1			1		
Racine, Wis.	38,002	9	10	1					1			
Roanoke, Va.	34,874	12	7				5			1	1	
Rockford, Ill.	45,401	21	2				2			3	27	1
Sacramento, Cal.	44,696	20	5		2		1			1		2
Salem, Mass.	43,697	11	2				1		3	1	1	
San Diego, Cal.	39,578	4	1	1			1		2	2		
South Omaha, Nebr.	26,259	4										
Superior, Wis.	40,384	9	1	1								
Taunton, Mass.	34,259	9	2						1	1		
Waltham, Mass.	27,834	5	3		1		1		1			
West Hoboken, N. J.	35,403		4		1				1			
Wheeling, W. Va.	41,641	10	12		3		3				5	
Williamsport, Pa.	31,860	9	2				1				2	
Wilmington, N. C.	25,748	8	1								1	1
York, Pa.	44,750		2		10		2				5	
Zanesville, Ohio.	28,026	10	22									1
<i>Cities having less than 25,000 inhabitants.</i>												
Alameda, Cal.	23,833	11	1		1							
Beaver Falls, Pa.	12,190		1									
Biddeford, Me.	17,079	11		1								
Braddock, Pa.	17,759		6		1		3				2	
Cambridge, Ohio.	11,327	1					1					
Clinton, Mass.	13,075	4			11				1	1	1	
Coffeyville, Kans.	12,687										1	
Columbus, Ga.	20,554	6										
Columbus, Ind.		2	1									
Concord, N. H.	21,497	11										
Cumberland, Md.	21,839	7					2			2	5	1
Dunkirk, N. Y.		5							1	1	1	
Galesburg, Ill.	22,089	14	2									
Harrison, N. J.	14,498	3	3				1		1			
Homestead, Pa.	18,710	6	3	2	1							
Kearny, N. J.	18,659	1	2		1		1					
Lafayette, Ind.	20,081	4	3		1							
Logansport, Ind.		6								1		
Marinette, Wis.	14,610	2					1			1		
Marlboro, Mass.	14,479	3	1									
Massillon, Ohio.	23,830	3	1									
Medford, Mass.	23,150	8			2							
Melrose, Mass.	15,715	4					1				1	
Moline, Ill.	24,190	4	2							1	3	1
Montclair, N. J.	21,150	4							1	1	1	
Morristown, N. J.	12,507	4			1				1	1		
Nanticoke, Pa.	18,857	3										
Newburyport, Mass.	19,240	2	1				1		1			
North Adams, Mass.	22,012	10					1		1		1	
Northampton, Mass.	19,431	3										
Plainfield, N. J.	23,550	4			2							
South Bethlehem, Pa.		3	3						1		1	
Steelton, Pa.	14,246	3	1									
Wilkesburg, Pa.	18,594	5	1		63							
Woburn, Mass.	15,308	4	1				1		1			

**STATISTICAL REPORTS OF MORBIDITY AND MORTALITY, STATES
OF THE UNITED STATES (Untabulated).**

CONNECTICUT.—Month of October, 1912. Population of reporting towns, 1,147,425. Total number of deaths from all causes 1,384, including diphtheria 19, measles 1, scarlet fever 6, tuberculosis 106, typhoid fever 15. Cases reported: Diphtheria 216 in 40 towns, measles 118 in 16 towns, scarlet fever 113 in 29 towns, tuberculosis 140 in 136 towns, typhoid fever 124 in 37 towns. Remarks: Four cases of poliomyelitis were reported in two localities.

NEW YORK.—Month of September, 1912. Population, 9,113,614. Total number of deaths from all causes, 10,345, including diphtheria 80, measles 23, scarlet fever 13, tuberculosis 1,058, typhoid fever 137. Cases reported: Diphtheria 950, measles 460, scarlet fever 446, smallpox 44, tuberculosis, pulmonary or laryngeal, 2,423, typhoid fever 944.

FOREIGN AND INSULAR.

CHINA.

Hongkong—Examination of Rats.

Surg. Brown reports October 7: During the week ended October 5, 1912, there were examined at Hongkong for plague infection 1,408 rats. No plague-infected rat was found.

Quarantine Restrictions Against Hongkong Removed.

The restrictions enforced by the Government of Bengal and Assam against Hongkong on account of plague were removed October 4, 1912.

CUBA.

Habana—Examination of Rats for Plague Infection.

The following statement was issued by the chief of the service of deratization at Habana:

Week ended October 26, 1912.

City blocks worked over.....	149
Rat traps used.....	361
Rats found dead.....	19
Rats trapped.....	654
Total number of rats taken.....	673
Total number of rats taken from July 6 to October 26, 1912.....	23, 102

No plague-infected rat was found during the week under report.

Modification of Restrictions on Vessels Clearing from Habana for United States Ports.

On account of the organization of continuous rat catching and examining measures in Habana, the restrictions upon vessels leaving Habana for United States ports have been reduced to the following:

1. All regular line vessels to be fumigated once every two months.
2. Ward Line vessels in the Mexico, Habana, New York line will be fumigated in New York every two months, when empty, and must bring a special certificate of fumigation.
3. Vessels arriving in Habana from clean ports and doing operations in open bay, day and night, under inspection, and taking proper precautions to prevent the ingress of rats, will be so certified on the bill of health, and will not have to be fumigated.
4. Vessels from clean ports going to approved rat-proof wharves, and taking precautions against ingress of rats—that is, using rat guards on lines, breasting off 6 feet, and raising gang planks when cargo is not being taken or discharged, will be so certified and allowed to go without fumigation.
5. All vessels, whether regular line or not, going to other wharves, must be fumigated before sailing.
6. Crews of vessels will be allowed ashore without restriction, but the gangway of vessels at the wharves will be raised from sunset to sunrise, unless the vessel is going to be fumigated. New crew may be shipped without restriction.
7. Passengers in transit will be allowed ashore without restrictions.

8. Fruit and vegetables in crates, taken on lighters from Paula or Habana Central wharves, may be shipped in crates without wire screening, but careful inspection is enjoined.

9. Crated merchandise without any kind of packing may be shipped, provided inspection can be made to assure its freedom from rats, or any hiding place for rats therein.

10. Any article of merchandise so packed as to be liable to harbor rats will not be allowed shipment unless repacked or fumigated under the supervision of this office.

Habana—Transmissible Diseases.

Oct. 21 to 31, 1912.

Diseases.	New cases.	Deaths.	Under treatment.
Leprosy.....			246
Malaria.....	2		2
Typhoid fever.....	9	1	26
Diphtheria.....	3	1	1
Scarlet fever.....	7		10
Measles.....	1		1
Varicella.....			2
Icterus gravis.....	1	1	
Paratyphoid.....	1		5

The cases of malaria were imported from Camaguey and Paso Real de Guane.

FRANCE.

Nantes—Typhus Fever.

At Nantes during the week ended November 2, 1912, there were reported 2 cases of typhus fever.

GREAT BRITAIN.

Liverpool—Examination of Rats.

According to information received from the port health officer through the American vice consul, 699 rats were examined at Liverpool for plague infection from October 17 to November 15, 1912. No plague-infected rat was found.

HAWAII.

Examination of Rodents for Plague Infection.

At Honolulu 137 rats were examined for plague infection during the week ended October 12, 1912, and during the week ended October 26, 1912, 144 rats. No plague-infected rat was found.

The last case of human plague occurred at Pepeekeo, Hawaii, September 13, 1912. The last plague-infected rat was found at Kukuihaele, Hawaii, October 19, 1912.

ITALY.

Cagliari Declared Free from Cholera.

Passed Asst. Surg. Robinson at Naples reports, November 8: Cagliari, island of Sardinia, has been officially declared free from cholera—no cases having been reported from October 19 to 30, 1912. The restrictions imposed on the embarkation of passengers and cargo from Cagliari have been removed.

Typhus Fever.

Typhus fever has been reported in Italy as follows: Catania, week ended October 26, 1912, 1 death; Leghorn, three weeks ended November 2, 1912, 9 cases with 5 deaths; Palermo, week ended October 26, 1912, 7 cases with 3 deaths.

JAPAN.**Status of Cholera.**

Surg. Irwin at Yokohama reports, November 4: There has been a decided decrease in the number of cases of cholera reported throughout Japan. No case has occurred in Kanagawa-ken since October 26 and the last case at Yokohama was reported October 15. The port may now be considered free from quarantinable disease. The total number of cases reported in the Empire during the week ended November 2 was 121, as against 229 in the preceding week. The total number of cases reported from the beginning of the epidemic is 1,932.

The number of foci is very much reduced. The principal points in which the disease still lingers are Saga-ken, Nagasaki-ken, Hyogo-ken, in which is situated Kobe, and Shidzuoka-ken.

Recently the Government has completed an examination of 3,500 contacts, among whom were found nine carriers of the cholera bacillus, and it has been arranged to examine 500 of these contacts daily.

Cholera in Korea.—In a report published by the sanitary bureau of the home department dated October 26 it is stated that during the week ended October 19 there were five new cases of cholera reported in Korea. Since the first case reported there have occurred 28 cases with 13 deaths.

Quarantine Restrictions at Yokohama Modified.

The following circular modifying the requirements of previous circulars on account of cholera was issued by Surg. Irwin at Yokohama:

Circular letter to agents, owners, and masters of vessels requiring bills of health from this office.

AMERICAN CONSULATE,
Yokohama, November 4, 1912.

GENTLEMEN: No case of cholera having occurred during the past week in Kanagawa-ken, the following changes are made in the previous circulars issued by this office under dates of October 5 and 11:

Second-class and steerage passengers from infected districts only, will be required to undergo five days' detention under observation before sailing to American ports.

Passengers and crew may be allowed liberty while the vessel is in port.

Paragraphs Nos. 2, 3, 4, 6, and 7 of the circular remain in force.

FAIRFAX IRWIN,
Surgeon, United States Public Health Service.

NEW ZEALAND.**Auckland—Examination of Rats.**

The following information was taken from bulletins issued by the department of health of New Zealand: During the four weeks ended October 12, 1912, there were examined at Auckland for plague infection 367 rats. No plague-infected rat was found.

The last case of human plague was notified May 8, 1911.

The last plague-infected rat was found May 31, 1911.

PHILIPPINE ISLANDS.**Plague at Manila.**

Passed Asst. Surg. Heiser, chief quarantine officer and director of health for the Philippine Islands, reports: During the week ended October 5, 1912, there were reported at Manila 3 cases of plague with 1 death, during the week ended October 12, 1 case and 2 deaths and during the week ended October 19, 1912, 1 case with 1 death.

During the week ended October 12, 1912, a case of plague was found in a house located at the corner of Principe and Muelle dela Industria Streets. This address is very close to the river water front and in an entirely different section of the city from any of the cases which have heretofore been reported. The patient was taken to the San Lazaro Hospital, and died 24 hours after admission. He was a barber, and the house in which he worked was a large combination tenement and store block, and with the exception of the division which he occupied the building was practically vacant. There was plenty of evidence that the entire house was badly rat infested, and dead rats, from the badly decomposed to the skeleton stage, were found therein. In opening the hollow walls in the part occupied by the patient dead rats and nests of young rats were found. All of these were forwarded to the laboratory, but were reported negative for plague. Rat proofing and an active rat catching campaign has been started in the neighborhood. The quarantine service is cooperating by fumigation of all of the river craft that berth in that vicinity.

Rats are now being caught in Manila at the rate of approximately 9,000 per month, but so far the percentage of infected rats found is the very low figure of 0.005 per cent. So far no infected rats have been found either in the infected house or in this newly stricken district.

Total number of cases and deaths to date, 12. Last case October 11, 1912.

PORTO RICO.**Plague Situation.**

Surg. Creel reports:

Rats examined Nov. 2 to 9, 1912.

Place.	Rats examined.	Rats found infected.
All Porto Rico.....	1,683	.....
San Juan municipality:		
San Juan.....	59	.....
Puerta de Tierra.....	30	.....
Santurce.....	154	.....

A summary of the plague situation to November 9, 1912, including human and rodent cases reported or discovered, was as follows: Rats examined, 27,498; rats found infected, 64; human cases, 56; deaths, 36.

RUSSIA.

Typhus Fever.

Typhus fever has been reported in Russia as follows: Moscow, two weeks ended October 5, 1912, 77 cases with 12 deaths; Riga, month of August, 1912, 3 cases; St. Petersburg, week ended October 26, 1912, 1 case; Vladivostok, Siberia, four weeks ended August 13, 1912, 11 cases with 2 deaths.

SPAIN.

Almeria—Smallpox.

The American consular agent reports the occurrence of 19 deaths from smallpox at Almeria during the month of October, 1912. During the preceding month 14 deaths from the same disease were reported at Almeria.

TURKEY IN ASIA.

Cholera.

The American consul at Bagdad reports October 16: Cholera broke out at Dier-el-Zor, a small town on the Euphrates in the northwestern part of Bagdad Province (vilayet), about September 30, 1912. To October 16, 233 cases with 187 deaths have been reported. A medical inspector has been sent from Bagdad to Ana, on the Euphrates, and all travelers from Dier outward are subjected to medical examination. If a case of cholera occurs among a group of travelers from Dier, all in the group are subjected to five days quarantine.

TURKEY IN EUROPE.

Constantinople—Cholera.

On November 19 there were officially reported at Constantinople 21 new cases of cholera with 12 deaths occurring in various parts of the city in addition to 23 cases with 4 deaths among refugees, giving a total of 312 cases with 110 deaths from November 5 to 19. No official statistics have been received with regard to cholera in the army.

VENEZUELA.

La Guaira—Yellow Fever.

Acting Asst. Surg. Stewart reports: During the week ended October 26 a case of yellow fever was reported at La Guaira, and on November 2 a case at Caracas.

MOVEMENTS OF INFECTED VESSELS.¹

CHOLERA.

Russian vessel, Nagasaki, Japan, August 10 and 13, 1912, 2 cases of cholera in personnel of vessel. (Name of vessel and its itinerary not given.)

Otaru Maru, Nagasaki, Japan, August 23, 1912, from Shanghai, 1 case of cholera in crew.

Kuchinotsu, Japan, August 29, 1912, from Shanghai, via Nagasaki, 1 case of cholera on board.

¹ Reported since July 1, 1912.

- Yokohama Maru*, Moji, Japan, August 21, 1912, from Hongkong, August 13, via Shanghai August 18, 1 case of cholera in the person of a first-class passenger; August 29, another case on board.
- Mexico Maru*, Moji, Japan, August 29, 1912, from Hongkong August 17, via Shanghai, 4 cases of cholera on board.
- Penza*, Nagasaki, Japan, August 29, 1912, from Shanghai, 1 case of cholera on board.
- Seiun Maru*, Nagasaki, Japan, August 29, 1912, from Shanghai, 4 cases of cholera on board.
- Nitsusho Maru*, Dairen, China, August 23, 1912, from Shanghai, 3 cases of cholera on board.
- Kobe, Japan, August 28, 1912, from Shanghai, via Dairen, 3 cases of cholera on board.
- Kobe Maru*, Dairen, China, August 23, 1912, from Shanghai, 1 case of cholera on board.

PLAGUE.

- India*, Aden, Arabia, July 1, 1912, from Bombay, June 22, 1 case of plague on board.
- Guillermite*, Arroyo, Porto Rico, July 2, 1912, from San Juan, 1 case of plague on board.
- Ezan Maru*, at sea, July 15 to 20, 1912, from Miike to Hongkong, 3 cases of plague on board.
- Amphitrite*, Trieste, Austria, July 14 to 25, 1912, from Mersina, via Port Said and Alexandria, 2 cases of plague on board.
- Bellaisa*, Hamburg, Germany, September 2 to 5, 1912, from Rosario, July 2, via Cape Verde Islands, 2 cases of plague in crew.
- River Tyne, September 28, 1912, from Hamburg, 1 case of plague in crew.

YELLOW FEVER.

- Chile*, Panama, Canal Zone, July 14, 1912, from Guayaquil, 1 case of yellow fever on board.
- Valkyrien*, Frontera, Mexico, August 19 to 21, 1912, from Maracaibo, June 18, 2 cases of yellow fever on board.
- Puebla*, Laguna del Carmen, Mexico, September 14, 1912, from Vera Cruz and other Mexican ports, 1 case of yellow fever on board.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Nov. 29, 1912.

[These tables include cases and deaths recorded in reports received by the Surgeon General, Public Health Service, from American consuls through the Department of State and from other sources.]

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
China:				
Hankow	Oct. 6-12.....	1	1	
Dutch East Indies:				
Java—				
Batavia	Sept. 29-Oct. 12...	116	92	16 cases, 19 deaths among Europeans.
Japan:				
Chiba ken.	Oct. 19-Nov. 1....	8		
Ehime ken.	do.	7		
Fukuoka ken.	do.	41		
Hiroshima ken.	do.	15		
Hyogo ken.	do.	27		
Kobe	Oct. 21-27.....	1	1	
Kanagawa ken.	Oct. 19-Nov. 1....	8		
Kochi ken.	do.	16		
Kumamoto ken.	do.	2		
Kyoto fu.	do.	1		
Nagasaki ken.	do.	44		
Oita ken.	do.	18		
Okayama ken.	do.	17		
Osaka fu.	do.	20		
Saga ken.	do.	47		
Shizuoka ken.	do.	20		
Tokushima ken.	do.	5		
Tokyo fu.	do.	25		
Wakayama ken.	do.	2		
Yamaguchi ken.	do.	27		
Russia:				
Astrakhan Government—				
Rachinka	Oct. 28.....	1	1	
Straits Settlements:				
Singapore	Sept. 29-Oct. 5....	1	1	
Turkey in Asia:				
Provinces—				
Bagdad—				
Dier-el-Zor	Sept. 30-Oct. 16...	233	187	
Aleppo—				
Aleppo	Oct. 29-Nov. 2....	17	11	
Turkey in Europe:				
Constantinople	Nov. 20.....			Present.

YELLOW FEVER.

Venezuela:			
Caracas	Nov. 2.....	1	
La Guaira	Oct. 20-26.....	1	

PLAGUE.

Italy:			
Turin	Oct. 29-Nov. 3....	1	
Philippine Islands:			
Manila	Sept. 30-Oct. 19...	5	4
Venezuela:			
La Guaira	Oct. 23.....	1	1

SMALLPOX.

Brazil:			
Sao Paulo	Sept. 22-28.....	13	
Canada:			
Montreal	Nov. 10-16.....	18	
Quebec	do.	1	
China:			
Shanghai	Oct. 7-27.....	1	7
Always present; 7 deaths among natives.			

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received during week ended Nov. 29, 1912.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Java—				
Batavia.....	Sept. 29-Oct. 5....	2		
India:				
Rangoon.....	.....do.....	1	2	
Mexico:				
Chihuahua.....	Nov. 4-10.....		1	
Mazatlan.....	Oct. 31-Nov. 5....	2		
Monterey.....	Nov. 4-10.....		1	
Portugal:				
Lisbon.....	Oct. 28-Nov. 3....	6		
Roumania:				
Bucharest.....				Aug. 1-31: 67 cases, 2 deaths.
Russia:				
Moscow.....	Sept. 22-28.....	1		
Odessa.....	Oct. 28-Nov. 2....	2		
Riga.....				Aug. 1-31: 1 death.
St. Petersburg.....	Oct. 20-26.....		1	
Warsaw.....	Sept. 1-7.....			
Spain:				
Barcelona.....	Nov. 3-9.....		7	
Straits Settlements:				
Singapore.....	Sept. 29-Oct. 5....	1	1	
Turkey in Asia:				
Beirut.....	Oct. 20-26.....		2	
Turkey in Europe:				
Constantinople.....	Oct. 28-Nov. 2....		23	

Reports received from June 29 to Nov. 22, 1912.

For reports received from Dec. 30, 1911, to June 28, 1912, see PUBLIC HEALTH REPORTS for June 28, 1912. In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Hungary—				
Csongrad, district	July 17-22	1	1	
Mindszent.				
Ceylon:				
Colombo.....	May 19-25.....	1		In the port.
China:				
Amoy.....	June 16-Aug. 24...	12	60	June 1-20, present in vicinity.
Dalny.....				Aug. 23-29, 3 cases on s. s. Nitsusho Maru and 1 case on s. s. Kobe Maru from Shanghai.
Hankow.....	Sept. 15-Oct. 5....	5	1	
Hoihow.....				July 5, 15 to 20 deaths daily; Aug. 3, decreasing. The seaport of the island of Hainan.
Nanking.....	Aug. 29.....	14	1	Among Europeans. Endemic.
Pechuia.....	Sept. 9.....	14		30 to 40 deaths daily; 15 miles from Amoy.
Shanghai.....	July 15-Sept. 25...	20	8	Among Europeans. Among natives increasing to end of August.
Swatow.....	July 20-Aug. 5....		41	July 20-25, 3 cases, 1 death among Europeans. Among Europeans June 1-22, sporadic cases occurring in the port.
Dutch East Indies:				
Java—				
Batavia.....	June 16-Sept. 28...	174	139	Sept. 28, 38 cases among Europeans.
Rembang, Province...	May 31-June 6....	1	2	
Samarang.....	Sept. 23.....			Present.
Surabaya.....	Mar. 28-June 18...	14	8	
Sumatra—				
Padangsehe, Upperland Section Agam.	May 26-June 22....	37	35	Present Sept. 16
Tapanoell, Province...	July 11.....			Present.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 29 to Nov. 22, 1912.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
India:				
Bassein.....	May 5-July 20....	35	26	
Bombay.....	May 19-Oct. 19....	1,911	1,490	
Calcutta.....	May 5-Aug. 31....		501	Apr. 21-27, 87 deaths. Received out of date.
Cocanada.....	Aug. 24-30.....	2	2	
Karachi.....	Aug. 14-Sept. 14....	140	65	Report of deaths incomplete; nearly all cases fatal.
Madras.....	May 19-Oct. 19....	226	165	Madras Presidency, May 1-Sept. 30: Cases, 62,299; deaths, 33,459.
Maulmain.....	May 5-Aug. 17....	22	22	
Rangoon.....	Apr. 1-Aug. 31....	100	71	
Indo-China:				
Saigon.....	May 14-Aug. 19....	634	514	
Italy:				
Sardinia—				
Cagliari.....	Aug. 14-Oct. 13....	64	20	
Japan:				Total to Oct. 13: Cases, 1,098.
Chiba ken.....				To Oct. 18, 58 cases.
Ehime ken.....	Sept. 21-27.....	5		To Oct. 13, 49.
Formosa.....				Total June 16-Aug. 31: 65 cases, 34 deaths.
Kelung.....	June 27.....			Epidemic.
Fukuoka ken.....	Sept. 1-Oct. 18....	123		To Oct. 13, 537.
Hiroshima ken.....	Sept. 21.....	4		To Sept. 27, 7.
Hyogo ken.....	Oct. 12-18.....	18		To Sept. 27, 7, including Kobe.
Kobe.....	Sept. 15-Oct. 20....	22	13	Aug. 28, 3 cases on s. s. Nitsusho Maru. Sept. 12-18, 2 cases, 1 death in the suburbs.
Kagawa ken.....	Oct. 12-18.....	26		
Kagoshima ken.....	Sept. 21-Oct. 18....	5		
Kanagawa ken.....				
Daishi-kawara.....	Sept. 25-Oct. 21....	10		
Hira-tsuka.....	do.....	1		
Hodo-gaya.....	do.....	2		
Kawasaki.....	do.....	15		
Nama-mugi.....	do.....	8		
Sumiyoshi-mura.....	do.....	1		
Tajima-mura.....	do.....	1		
Tsurumi.....	do.....	1		
Yokohama.....	do.....	15	15	
Kiushiu.....				
Kuchinotsu.....				Aug. 21-29, 1 case on s. s. Oturu Maru from Shanghai.
Miike.....	Sept. 1-15.....	20	13	
Mitsui coal mines.....	Sept. 23.....			Present.
Moji.....	Sept. 1-7.....	7	2	Aug. 21-29, 2 cases on s. s. Yokohama Maru, and 4 cases on s. s. Mexico Maru from Shanghai. Total to Sept. 23, 141 cases.
Shimabara.....	To Sept. 15.....	3	1	
Wakamatsu.....	do.....	68	21	
Kumamoto ken.....	Sept. 21-Oct. 18....	9		
Kyoto fu.....	do.....	5		
Kyoto.....	Sept. 10-19.....	4	2	
Miyako Islands.....	July 10.....	81		
Nagasaki ken.....	Sept. 21-Oct. 18....	43		
Nagasaki.....	Oct. 6-20.....	2	2	Aug. 10-13, 2 cases among the personnel of vessel of the Russian volunteer fleet. Aug. 21-29, 1 case on s. s. Penza, 4 cases on s. s. Seion Maru, and 1 case on s. s. Oturu Maru from Shanghai.
Oita ken.....	Sept. 21-Oct. 18....	16		
Okayama ken.....	do.....	6		
Osaka fu.....	do.....	16		To Sept. 28, 85, including Osaka for same period.
Osaka.....	Sept. 11-Oct. 11....	32	22	
Saga ken.....	Sept. 21-Oct. 18....	15		
Saitama ken.....	Oct. 12-18.....	1		
Shimonoseki.....	Sept. 23.....	40	13	
Tokushima ken.....	Oct. 12-18.....	1		
Tokyo fu.....	Sept. 23-Oct. 18....	42		To Oct. 13, 157.
Tokyo.....	Sept. 24-30.....	24		
Do.....	Oct. 2-4.....	2		
Yamaguchi ken.....	Sept. 21-Oct. 18....	54		To Oct. 13, 242.
Other districts.....				To Oct. 13, 161 cases.
Russian Empire:				
Astrakhan.....	June 11-July 27....	6	2	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 29 to Nov. 22, 1912.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Siam:				
Bangkok.....	Apr. 21-Sept. 14....		1,026	
Straits Settlements:				
Singapore.....	May 12-Oct. 5....	100	89	
Turkey in Asia:				
Beirut.....	Aug. 6-Sept. 22....	15	9	
Bitilis.....	Oct. 1-9....	11	14	
Cesaree.....	do.....	1		
Damascus.....	July 18-Oct. 13....	327	262	And vicinity.
Provinces—				
Adana—				
Adana.....	May 14-Aug. 1....	17	12	
Ak Keupru.....	Apr. 8-June 13....	12	6	
Ayas.....	June 11-24....	12	4	
Bor.....	May 28-Aug. 10....	24	23	
Deurt Yol.....	Sept. 16-22....	7	4	
Dijhan.....	May 28-July 27....	14	11	
Dorach Bache.....	do.....	4	5	
Nigde.....	June 15-Aug. 24....	72	80	
Oula Kichia.....	May 28-July 6....	5	10	
Sis.....	May 28-June 15....	5	5	
Tarsus.....	May 28-July 9....	21	9	
Aleppo—				
Aleppo.....	May 19-Aug. 31....	305	267	
Alexandretta.....	May 28-Aug. 1....	8	3	
Amk.....	July 1-6....	5	4	
Aintab.....	July 1-Oct. 9....	23	30	
Antioch.....	Apr. 17-Oct. 9....	28	31	
Arka.....	Apr. 17....	10	4	
Bilan.....	Sept. 8-15....	7		
Bierdjik.....	Sept. 23-30....	1	2	
Djisri-Chougour.....	June 23-Sept. 7....	17	5	
Delbeston.....	July 23-Sept. 15....	11	2	
Elbistan.....	Sept. 23-Oct. 9....	8	4	
Gisser.....	July 7-13....	13	6	
Harem.....	June 23-July 22....	47	33	
Hersem.....	July 1-6....	5	4	
Idlb.....	June 23-July 8....	6	5	
Keudige.....	June 23-29....	4		
Killis.....	June 16-Oct. 9....	45	21	
Kiriqui.....	July 14-22....	2	2	
Marach.....	June 15-Sept. 7....	212	103	
Ourfa.....	Aug. 20-Oct. 9....	69	64	
Reca.....	Aug. 23-Sept. 30....	19	13	
Sarenda.....	July 1-6....	7	6	
Talacrin.....	do.....	3	3	
Angora—				
Chehissar.....	June 10-July 29....	3	8	
Iskilib.....	Aug. 26-Sept. 7....	4		
Nehie-Tomarza.....	July 29-Oct. 9....	20	10	
Sandal.....	June 24-July 5....	4	9	
Ufkure.....	Sept. 9-22....	13	13	
Diarbekir.....	Aug. 21-Oct. 9....	27	41	
Viran-Chehir.....	Aug. 21-Sept. 30....	15	13	
Erzeroum—				
Hassan-Mansour....	July 31-Sept. 7....	25	11	
Heiaz—				
Medina.....	Oct. 1-9....		32	
Mekka.....	do.....	5	4	Present among troops and pilgrims, Sept. 26.
Konia—				
Alaya.....	July 14-27....	1	1	
Ergeli.....	June 18-Sept. 15....	98	55	
New Chehir.....	July 30-Sept. 30....	117	75	
Oulou-Kichla.....	Sept. 15....	4	4	
Mersina.....	June 9-July 28....	40	33	
Severek.....	Aug. 14-17....	3	8	
Sivas—				
Darendé.....	Sept. 23-30....	5	4	
Smyrna—				
Smyrna.....	Sept. 1-15....		1	
Syria.....	July 19-Oct. 9....	81	76	
Latakia.....	Aug. 31-Sept. 7....	2	3	
Tarsus.....	June 25-July 9....	11	16	
Zor.....	Oct. 1-9....	5	4	
Straits Settlements:				
Singapore.....	Aug. 25-31....	1	1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 29 to Nov. 22, 1912.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Zanzibar.....	Aug. 5-Sept. 30....	85	59	Outbreak in the native prison. Only 1 case in the city. Including Aug. 5-Sept. 7, 15 cases at Mwera, 4 at Bububu, 1 at Mtoni, 6 among prisoners, 2 at N'Gambo district, 9 at Kibonde-Mzungu, 2 in Fuoni, and 4 in Walezo.

YELLOW FEVER.

Brazil:				
Ceara.....	July 1-31.....	1		
Manaos.....	June 2-Oct. 5.....		32	
Pernambuco.....	Apr. 16-July 15.....		12	
Chile:				
Toco district.....	May 1-16.....	62	17	
Tocopilla.....	May 1-June 17.....	502	195	Total Jan. 28-June 17: Cases, 1,072; deaths, 374, including report, p. 1058, Pt. I.
Colombia:				
Barranquilla.....	July 14-20.....		1	From up Magdalena River.
Dahomey:				
Abomey.....	May 25-June 5.....	6	3	
Porto Novo.....	June 13.....		1	
Ecuador:				
Bucay.....	June 1-15.....	1		
Chobo.....	June 15-30.....	2	1	
Duran.....	May 1-June 30.....	2	1	
Guayaquil.....	May 1-Sept. 30.....	59	40	
Milagro.....	May 16-Sept. 30.....	11	6	
Naranjito.....	May 1-Sept. 30.....	16	7	
Yaguachi.....	May 16-June 30.....	2	1	
Mexico:				
Campeche—				
Carmen.....	Sept. 6-29.....	2	2	The fatal case Sept. 6 on s. s. Puebla, from Vera Cruz and other Mexican ports.
Tabasco.....				
Cardenas.....	Oct. 11.....		2	
Comalcalco.....	Oct. 16.....			Present.
Cunduacan.....	Sept. 28-Nov. 3.....	4		
Huimanguillo.....	Oct. 12.....	1		
Frontera.....	Oct. 11.....	1		
	Aug. 31-Oct. 11.....	10	3	Aug. 19-21, 2 cases and 1 death on the Swedish schooner Valkyrien.
Jalapa.....	Oct. 11-Nov. 16.....	2		
San Juan Bautista.....	June 23-Nov. 3.....	36	10	Total May 4-Nov. 3: Cases, 58; deaths, 25, including previous reports.
Yucatan.....				Aug. 1, 1911, to Nov. 9, 1912, 73 cases, 34 deaths.
Espita.....	Aug. 25-30.....	1		
Merida.....	July 14-Nov. 9.....	6	3	Total Aug. 1, 1911, to Sept. 22: Cases, 71; deaths, 33, including previous reports. The 2 cases July 16-22 from Motul, 29 miles distant.
Canal Zone:				
Panama.....	July 14.....	1	1	At Santo Thomas Hospital, from s. s. Chile, from Guayaquil.
Peru:				
Iquitos.....	Jan 1-May 31.....		42	Endemic. Year 1908, deaths, 11; 1910, 1; 1911, 76.
Do.....	July 1-31.....		1	
Venezuela:				
Caracas.....	May 1-Aug. 31.....		10	July 22, 3 cases from El Valle; 1 case from Villa de Cura, about 29 miles distant; and to July 31, 2 other cases; Caracas, Aug. 31, 1 case. Total Jan. 1-Oct. 10: Cases, 43; deaths, 19, including previous reports. Sept. 24, 1 case from Cua; Sept. 26, 1 case from Ocumare. Year 1911: Cases, 172; deaths, 107.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 29 to Nov. 22, 1912.

YELLOW FEVER—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Venezuela—Continued.				
Cua.....	July 20.....			Present.
La Guaira.....	May 1.....	1		
La Victoria.....				Endemic. July 20, present.
Macuto.....	June 1.....	1		
Maiquetia.....	June 17-Oct. 5.....	12	5	
Victoria.....	Oct. 1.....			Present.

PLAGUE.

Algeria:				
Algiers.....	July 12.....		1	In Hospital El Kettar, in vicinity. Pneumonic.
Le Ruisseau.....	July 9-13.....		5	4 miles from Algiers. Pneumonic.
Arabia:				
Aden.....	July 1.....		1	From s. s. India.
Oman—				
Maskat.....	June 1-22.....	1		
Argentina:				
Buenos Aires.....	Oct. 7.....		3	Outbreak occurred in cancer section, clinical hospital.
Austria-Hungary:				
Trieste.....	July 14-25.....	2		In isolation hospital from s. s. Amphitrite from Messina via Port Said and Alexandria.
Azores:				
Terceira.....	Sept. 11-Oct. 31.....	35	21	In Praia da Victoria and Angra do Heroismo.
Brazil:				
Nietheroy.....	Mar. 25.....	8	2	
Pernambuco.....	Aug. 16-Sept. 30.....		3	
Rio de Janeiro.....	June 23-Oct. 5.....	3		
British East Africa:				
Mombasa.....	Sept. 1-15.....	4	3	Oct. 27, present.
Nairobi.....	do.....	2		
Chile:				
Iquique.....	May 26-Sept. 21.....	26	13	
China				May 18-June 15, present in the magistracies of Fungshun, Cayung, and Puning.
Amoy.....	May 20-Aug. 24.....		307	May 20-June 1, 46 cases.
Ampo.....	May 18-June 29.....			Present.
Canton.....	July 1-10.....			May 18, present. 45 cases daily. Mainly among children.
Chefu.....	June 2-8.....			2 deaths on s. s. Cheongshing between Tientsin and Taku.
Eng Chhun.....	July 6.....			Present. 100 miles inland from Amoy, and prevalent in the surrounding country.
Hongkong.....	May 12-Sept. 14.....	1,393	1,144	
Packhoi.....	May 1-29.....		35	
Shanghai.....	Nov. 2-11.....	13		
Tientsin.....	June 2-8.....	1	1	From s. s. Cheongshing from Hongkong.
Wenchang.....	June 4.....			On the island of Hainan, 10 to 20 cases daily.
Cuba:				
Habana.....	July 4-27.....	3	2	
Dutch East Indies:				
Java—				
Paseroean Residency.....	May 12-Aug. 3.....	203	198	
Provinces—				
Kediri.....	Mar. 31-July 31.....	8	5	
Madioen.....	Mar. 31-Aug. 3.....	37	37	
Ecuador:				
Guayaquil.....	May 1-Sept. 30.....	63	25	Report for July not received.
Egypt				Total, Jan. 1-Sept. 15: Cases 813; deaths, 406, including report, p. 1039, Pt. I.
Alexandria.....	May 27-Oct. 6.....	24	8	
Port Said.....	May 29-Aug. 26.....	8	2	
Provinces—				
Assiout.....	May 25-Aug. 27.....	16	7	
Behera.....	July 31-Oct. 7.....	5	1	
Beni Souef.....	May 30-July 28.....	13	10	
Charkieh.....	Apr. 28-Sept. 2.....	12	4	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 29 to Nov. 22, 1912.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Egypt—Continued.				
Provinces—Continued				
Dakahlia.....	Aug. 8.....	1	1	
Fayoum.....	Apr. 28-Aug. 1.....	50	26	
Galioubeh.....	Apr. 23-Sept. 15.....	4		
Garbieh.....	Aug. 27-Oct. 9.....	19	3	
Girgeh.....	May 26-Aug. 6.....	52	42	
Menouf.....	Aug. 31-Sept. 30.....	5	1	
Minieh.....	May 27-Sept. 9.....	40	12	
Germany:				
Hamburg.....				Sept. 2-5, 2 cases on s. s. Bellalisa from Rosario via Cape Verde Islands.
Great Britain:				
Liverpool.....	July 26.....	1		
River Tyne Port Sanitary District.....	Sept. 10-16.....	1	1	From s. s. Bellalisa from Rosario, via Hamburg.
Hawaii:				
Pepeekeo.....	Sept. 13.....	1	1	
India:				
Bombay.....	May 19-Oct. 19.....	410	337	
Calcutta.....	Apr. 21-Aug. 31.....		475	
Karachi.....	Apr. 1-Oct. 12.....	65	64	
Rangoon.....	Apr. 1-Aug. 31.....	458	431	
Bombay Presidency and Sind.....	Apr. 21-Aug. 31.....	4,116	3,053	
Madras Presidency.....	do.....	609	452	
Bengal.....	do.....	621	611	
Bihar and Orissa.....	do.....	5,563	4,828	
United Provinces.....	do.....	7,594	7,061	
Punjab.....	do.....	16,016	13,117	
Burma.....	do.....	964	911	
Central Provinces.....	do.....	284	238	
Mysore State.....	do.....	1,088	772	
Hyderabad State.....	do.....	356	263	
Central India.....	Apr. 21-May 25.....	276	227	
Rajputana and Ajmere Merwara.....	Apr. 21-June 29.....	570	474	
Kashmir.....	Apr. 21-Aug. 3.....	200	172	Total for India, Apr. 21-Aug. 30: Cases, 38,347; deaths, 32,179.
Indo-China:				
Saigon.....	May 14-Aug. 19.....	77	50	
Japan:				
Formosa.....	Apr. 22-Aug. 17.....	97	69	
Mauritius:				
Apr. 7-Aug. 29.....		71	32	
Morocco:				
Casablanca.....	Sept. 12-29.....	11	1	To Sept. 29, 5 cases were among Europeans.
Persia:				
Bushir.....	May 12-June 15.....	130	116	Total Feb. 4-June 15: Cases, 1,045; deaths, 719, including report, p. 1060, Pt. I. June 1-7, on the route to Shiraz, 4 fatal cases. Year 1911: Cases, 879; deaths, 426. July 6, 1 fatal case.
Peru:				
Callao.....				
Trujillo.....	Oct. 1.....	2		
Philippine Islands:				
Iloilo.....	July 5-Sept. 21.....	9	9	
Manila.....	June 14-Sept. 28.....	8	8	
Mariveles quarantine station.....	Apr. 30-May 7.....	1	1	From s. s. Taisan from Amoy.
Porto Rico:				
Arroyo.....	June 22.....	1		Total June 14-Sept. 14: Cases, 57; deaths, 36. On the schooner Guillermito, from San Juan.
Carolina.....	June 25-July 19.....	2	2	
Dorado.....	July 15.....	1	1	
Lolza.....	June 28.....	1	1	
San Juan.....	June 21-Sept. 11.....	26	17	Total June 14-Sept. 11: Cases, 38 deaths, 17.
Santurce.....	June 22-Aug. 5.....	13	3	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 29 to Nov. 22, 1912.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Russian Empire:				
Astrakhan Government.....				Total July 4-Sept. 8: Cases, 55; deaths, 41.
Rachinka.....	Oct. 20-26.....	1	1	
Libistchensky district.....				Sept. 16, free.
Balaptubek.....	May 15-June 2.....	2	2	
Karabas.....	May 15-June 16.....	13	12	
Kudeymula.....	May 27-June 16.....	5	5	
Tchernoyarsk.....	July 1-Sept. 8.....	32	24	Including previous report.
Tsarevsk district.....	July 29-Sept. 8.....	17	13	
Djanibek.....	Aug. 21-Sept. 8.....	6	4	
Ural—				
Tschelirtinsky.....	May 20-June 16.....	13	11	
Siam:				
Bangkok.....	Apr. 21-July 13.....		2	
South Africa:				
Durban.....				Jan. 14-June 21: Cases, 32; deaths, 26, including report, p. 1060, Pt. I.
Straits Settlements:				
Kuala Lumpur.....	Apr. 15.....	3	1	
Singapore.....	May 5-July 20.....	17	11	Sept. 1-7, 1 fatal case.
Turkey in Asia:				
Adalia.....	May 28-July 6.....	3	3	
Basra.....	May 20.....	1	1	
Jiddah.....	May 18.....	1		
West Indies:				
Trinidad.....				Total Apr. 1-June 13: Cases, 11; deaths, 7; including report, p. 1060, Pt. I; 3 of these cases were in Tunapuna.
Do.....	July 2-11.....	2		
Venezuela:				
Caracas.....	June 1-Aug. 16.....	5	4	
La Guaira.....	Nov. 4.....	1		
At sea.....	July 15-20.....	2		On s. s. Ezan Maru en route from Miike, Japan, to Hongkong.

SMALLPOX.

Abyssinia:				
Adis Ababa.....	Sept. 7.....			Prevalent.
Algeria:				
Departments—				
Algiers.....	Jan. 1-July 13.....	33		
Constantine.....	Apr. 1-Aug. 31.....	87		
Oran.....	May 1-Aug. 31.....	31		
Arabia:				
Aden.....	June 18-24.....		1	
Argentina:				
Buenos Aires.....	June 1-30.....		1	
Australia:				
Fremantle quarantine station.....	Apr. 19.....	1		From s. s. Malwa from London via Colombo.
Townsville.....	May 24.....			1 case on s. s. Yawata Maru from Japan.
Austria-Hungary:				
Bohemia.....	May 12-Sept. 21.....	25		
Galicia.....	May 12-Oct. 12.....	29		
Vienna.....	July 14-Aug. 3.....	1		
Brazil:				
Pernambuco.....	Apr. 16-Sept. 30.....		268	
Rio de Janeiro.....	May 19-Oct. 5.....	45	6	
British East Africa:				
Mombasa.....	May 1-July 31.....	11	2	
Canada:				
Provinces—				
British Columbia—				
Vancouver.....	July 14-20.....	1		
Nova Scotia—				
Halifax.....	July 7-13.....	1		
Ontario—				
Ottawa.....	June 9-15.....	1		
Toronto.....	Oct. 13-19.....	1		
Windsor.....	June 12-22.....	2		
Quebec—				
Montreal.....	June 16-Nov. 9.....	30		
Quebec.....	July 28-Nov. 9.....	6		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 29 to Nov. 22, 1912.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Chile:				
Coquimbo.....	May 26-Sept. 28....	99	18	Mar. 1-May 1, 30 cases.
La Serena.....	Nov. 30-May 7....	300	40	
China:				
Amoy.....	May 21-June 8....			Present in vicinity.
Chungking.....	May 5-Sept. 21....			Present.
Dalny.....	June 23-July 13....	2	1	
Hongkong.....	May 12-Sept. 21....	30	15	
Nanking.....	May 19-July 20....			Do.
Shanghai.....	May 23-Sept. 8....	6	17	Deaths among natives.
Tientsin.....	June 2-8....		1	
Dutch East Indies:				
Java.....				
Batavia.....	May 12-Sept. 28....	58	16	
Surabaya.....	Apr. 1-30....	155	70	June 4-July 24, still epidemic.
Egypt:				
Alexandria.....	Sept. 28-Oct. 6....	3	3	
Cairo.....	May 14-Sept. 2....	11	5	
Port Said.....	do.....	2	2	
France:				
Lyon.....	Oct. 7-13....		1	
Marseille.....	July 1-Sept. 30....		8	
Nantes.....	June 17-July 6....	4		
Paris.....	June 2-Oct. 19....	8	1	
Germany.....				Total, June 2-Oct. 5, 39 cases.
Hamburg.....	Sept. 8-14....	1		
Great Britain:				
Bristol.....	June 22-Aug. 3....	2	1	
Liverpool.....	June 2-8....	1		
London.....	Aug. 24-Sept. 7....	2		
Hawaii:				
Honolulu.....	July 9-13....	1		
Honduras:				
	July 19-31....			Present in vicinity of the terminus and along the Honduras National Railway.
La Pomienta.....	July 29....			Present.
Portorillas.....	July 31....			Do.
San Pedro.....	Oct. 14....	1		
Santa Barbara.....	July 29....			Do.
Tegucigalpa.....	Sept. 19....	36		35 of these cases occurred several weeks previous to this date.
Zacapa.....	July 29....			Do.
India:				
Bombay.....	May 19-Oct. 19....	228	179	Apr. 21-27, 2 cases.
Calcutta.....	May 5-Aug. 17....		25	
Karachi.....	May 19-Aug. 10....	3	3	
Madras.....	May 19-Oct. 19....	35	22	
Maulmain.....	Jan. 1-July 6....		117	
Rangoon.....	Apr. 1-Aug. 31....	210	78	
Indo-China:				
Saigon.....	May 14-Aug. 12....	10	5	
Italy:				
Leghorn.....	June 9-July 6....	9		
Messina.....	July 1-31....		1	
Naples.....	June 2-Oct. 12....	28	4	
Palermo.....	May 26-Sept. 7....	9	3	
Rome.....	Mar. 31-Apr. 6....	1	1	
Turin.....	June 3-9....	1		
Venice.....	Jan. 1-Apr. 30....	40	10	
Japan:				
Kobe.....	June 3-23....	3		
Mexico:				
Aguascalientes.....	June 9-Nov. 3....		15	
Chihuahua.....	Mar. 4-Oct. 21....	112	71	
Durango.....	June 1-Oct. 31....	2	4	
Frontera.....	July 7-11....	1		
Guadalajara.....	June 9-Aug. 31....	7	4	
Guaymas.....	July 14-20....			Present in small towns in vicinity.
Jalapa.....	Sept. 1-7....	1		
Juarez.....	June 16-Oct. 19....		3	
Mazatlan.....	June 19-Oct. 22....		9	Total Jan. 1.-June 30: Deaths, 29.
Minatitlan.....	July 29....	2		Aug. 21, still present.
Mexico.....	May 19-Sept. 28....	407	184	
Piedras Negras.....	Sept. 1-7....		1	32 miles from Vera Cruz, on the Vera Cruz & Pacific R. R.
Puerto Mexico.....	July 11-Aug. 31....	5	3	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 29 to Nov. 22, 1912.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Mexico—Continued.				
Salina Cruz.....	June 29-Aug. 31...	23	5	Present.
San Geronimo.....	Aug. 1.....	.....	.....
San Luis Potosi.....	Apr. 7-Aug. 24....	8	10	Do.
Tampico.....	Sept. 10-20.....	1	1	
Tehuantepec.....	Aug. 1-21.....	.....	.....
Newfoundland:				
St. Johns.....	July 14-Aug. 7....	7	.....
Peru:				
Callao.....	May 19-June 29....	.....	.....	Do.
Portugal:				
Lisbon.....	May 27-Oct. 26....	86	.....
Roumania:				
Russia:				Total Mar. 1-June 30: Cases, 38.
Batoum.....	July 1-31.....	1	.....	May 1-July 31, 3 deaths.
Libau.....	May 14-Aug. 4....	1	1	
Do.....	June 22-28.....	2	.....
Moscow.....	May 19-Sept. 14....	20	4	
Odessa.....	May 13-Oct. 19....	18	5	
Reval.....	June 1-30.....	.....	1	
Riga.....	June 9-29.....	8	.....
St. Petersburg.....	May 27-Oct. 12....	103	30	
Warsaw.....	Apr. 21-Aug. 31....	71	27	
Siam:				
Bangkok.....	Apr. 21-Sept. 14....	.....	77	
Siberia:				
Vladivostok.....	May 17-June 28....	2	.....
Spain:				
Almeria.....	June 1-Sept. 30....	.....	34	
Barcelona.....	July 1-Nov. 2.....	.....	33	
Cadiz.....	May 1-Sept. 30....	.....	9	
Madrid.....	July 1-Aug. 31....	.....	7	
Malaga.....	July 1-31.....	.....	3	
Seville.....	June 1-Sept. 30....	.....	69	
Valencia.....	June 2-Nov. 2.....	117	6	
Straits Settlements:				
Penang.....	July 14-20.....	2	2	
Singapore.....	June 23-July 20....	4	1	
Switzerland:				
Basel.....	Sept. 22-Oct. 12....	5	.....
Berne.....	May 5-11.....	2	.....
Geneva.....	do.....	1	.....
Lucerne.....	May 12-18.....	1	.....
Neuchatel.....	do.....	1	.....
Turkey in Asia:				
Beirut.....	May 26-Oct. 12....	161	.....	Sept. 14, 1 case.
Dardanelles.....	June 23-Oct. 12....	.....	15	
Turkey in Europe:				
Constantinople.....	May 27-Oct. 26....	.....	278	
Union of South Africa:				
Durban.....	Apr. 28-July 27....	21	4	
Johannesburg.....	July 22-Aug. 31....	73	.....
Uruguay:				
Montevideo.....	May 1-31.....	1	.....
Venezuela:				
La Guaira.....	June 6.....	1	.....
Zanzibar.....	Sept. 15-Oct. 7....	2	2	

MORTALITY.

WEEKLY MORTALITY TABLE, FOREIGN AND INSULAR CITIES.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—										
				Cerebro-spinal meningitis.	Cholera.	Diphtheria.	Plague.	Pollomyelitis.	Scarlet fever.	Smallpox.	Tuberculosis.	Typhoid fever.	Typhus fever.	Yellow fever.
Aguscalientes.....	Nov. 10	40,000	38	1		5						1		
Aix-la-Chapelle.....	Oct. 26	155,289	37									4	1	
Aleppo.....	Nov. 2	200,000			11									
Amsterdam.....	do.	584,979	128			1				1		16	3	
Asuncion.....	Oct. 5	75,000		3								3	1	
Do.....	Oct. 12											3	2	
Athens.....	Oct. 26	250,010	69	1								14		
Barcelona.....	Nov. 2	591,272	231			1				10		19	7	
Do.....	Nov. 9		222			2				7		17	8	
Barmen.....	Oct. 26	171,400	40						1			3	1	
Batavia.....	Oct. 5	217,630	48		42		14							1
Do.....	Oct. 12		55		50									
Beirut.....	Oct. 26	80,000								2		2		
Do.....	Nov. 2											3	1	
Belfast.....	do.	391,974	126			1			2			24		
Bergen.....	do.	87,500	13			1						3		
Berlin.....	Oct. 19	2,070,333	455			12						60	3	
Bombay.....	do.	979,445	663		9		6			1	50			
Bordeaux.....	Nov. 9	253,000	81								10	1		
Bradford.....	Oct. 26	289,618	66									8		
Do.....	Nov. 2		81			4					7			
Bremen.....	Oct. 19	246,850	61			5						7		
Do.....	Oct. 26		60			6					10			
Do.....	Nov. 2		78			5						8		
Brussels.....	Oct. 26	745,380	157			2			2		15			
Do.....	Nov. 2		175						1		14			
Budapest.....	Oct. 26	881,000			2									
Chemnitz.....	do.	306,950	75		2							4		
Do.....	Nov. 2		73		1							6	1	
Chihuahua.....	Nov. 10	36,000	33		1					1		4		
Christiania.....	Nov. 2	248,000	57		1							8		
Do.....	Nov. 9		68											
Cologne.....	Oct. 26	533,147	122			1			1		11			
Colombo.....	Oct. 12	227,026	125			1					11			
Constantinople.....	Oct. 26	1,300,000	229			1					18		4	
Do.....	Nov. 2		202			1					23		3	
Dalny.....	Sept. 28	48,442	20						1			1		
Do.....	Oct. 5		11										2	
Dresden.....	Oct. 26	560,200	121			3					10			
Do.....	Nov. 2		121			1					14			
Dublin.....	do.	400,865	147			2			3		27	2		
Dundee.....	do.	165,300	72			1			1		5			
Frankfort on the Main.....	Oct. 19	431,600	101			2						1		
Glasgow.....	Nov. 9	1,013,792	264			4				1				
Gothenburg.....	Oct. 26	170,100	42					1				7		
Do.....	Nov. 2		35	1				1			12			
Hamburg.....	do.	953,079	253			8			6		35			
Hankow.....	Oct. 12				1									
Havre.....	Oct. 26	136,159	51								7			
Hull.....	Nov. 2	282,988	81			2						1		
Iquique.....	Oct. 5	40,000									5	1		
Kingston, Canada.....	Nov. 16	21,000	5			1					1			
Kingston, Jamaica.....	Nov. 2	57,379	4								2	2		
Kobe.....	Oct. 27	425,023	134	1								1		
Leeds.....	Nov. 9	445,568	143			2					14			
Leghorn.....	Nov. 2	104,000	27								1	1	2	
Leipzig.....	Oct. 26	605,755	141			2					16			
Do.....	Nov. 2		135			4			1		20			
Libau.....	do.	84,000				3								
Liege.....	Oct. 26	169,124	52								1			
Liverpool.....	Nov. 9	752,055	288			3			1		23	1		
London.....	Nov. 2	7,340,079	1,810			15				8	151			
Madras.....	Oct. 19	518,660	318	5						1				
Magdeburg.....	Oct. 12	290,176	101			3						7		
Do.....	Oct. 19		102			8						8		
Do.....	Oct. 26		84			5			1			5		
Do.....	Nov. 2		95			4						3		
Manchester.....	Oct. 26	724,168	197			4				5				
Do.....	Nov. 2		204			2						1		

MORTALITY—Continued.

Weekly mortality table, foreign and insular cities—Continued.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—										
				Cerebro-spinal meningitis.	Cholera.	Diphtheria.	Plague.	Poliomyelitis.	Scarlet fever.	Smallpox.	Tuberculosis.	Typhoid fever.	Typhus fever.	Yellow fever.
Mannheim	Oct. 19	203,262	26								4			
Do.	Oct. 26		30			1					4			
Messina	Nov. 2	127,000	51						5		2			
Monterey	Nov. 10	100,000								1	2	1		
Montreal	Nov. 16	466,197	143	1		1			1		19	1		
Moscow	Sept. 28	1,625,487	660	1		11			9		80		8	
Do.	Oct. 5		604	2		16			15		85	2	4	
Do.	Oct. 12		619			13			20		82	2	2	
Nagasaki	Oct. 20	179,257	44		1						7			
Nantes	Nov. 2	171,535	56								9			
Newcastle-on-Tyne	do.	269,193	77			1					5			
Nottingham	do.	262,563	71			2					1			
Nuremberg	Oct. 5	354,365	80								12	1		
Do.	Oct. 12		81								12			
Do.	Oct. 19		85						1		6			
Odessa	Oct. 26	600,000	175			2			4		20	8		
Do.	Nov. 2		157			2			1		17	7		
Ottawa	Nov. 9	90,000	28								1	2		
Do.	Nov. 16		27						1		1			
Palermo	Nov. 2	340,000	115						2		8	2	2	
Para	Oct. 26	185,000	62								4	1	1	
Patras	Oct. 27	40,000	19	1							7	1		
Do.	Nov. 2		14	1					1		2	1		
Prague	Oct. 26	225,817	64						3		11			
Rangoon	Oct. 5	293,316	218				24			2	12			
Rotterdam	Nov. 2		104						4					
Santiago	Nov. 9	58,544	17								1	1		
Singapore	Oct. 5	303,328	220		1						1			
Smyrna	Sept. 14	400,000	226								9	2		
Do.	Sept. 21		242								16	2		
Do.	Sept. 28		249								7	2		
Do.	Oct. 5		259	1							9	1		
Do.	Oct. 12		275	1							11	5		
Stettin	Oct. 26	241,000	62			1			1		3			
Do.	Nov. 2		70			3					5			
Stockholm	Oct. 26	346,599	89			1			1		16			
Stoke-on-Trent	Nov. 2	237,153	61			1					3	1		
Do.	Nov. 9		57								10	2		
Swansea	Oct. 26	117,150	32						1		3	1		
Do.	Nov. 2		33			1			1		5			
Turin	do.	430,770	126			1					15			
Valencia	do.	235,000	117			1					6	3		
Vienna	Oct. 19	2,098,225	645			1					90			
Do.	Oct. 26		566			3			3		67			
Warsaw	Sept. 7	821,369	269	3		3			11	1	35	7		
Winnipeg	Nov. 16	166,553	64			1						1		

MORTALITY FOREIGN AND INSULAR COUNTRIES AND CITIES
(Untabulated).

AUSTRIA-HUNGARY—*Brunn*.—Month of August, 1912. Population 108,944. Total number of deaths from all causes 199, including measles 2, tuberculosis 45.

BRAZIL—*Ceara*.—Month of September, 1912. Population 60,000. Total number of deaths from all causes 114, including measles 1, tuberculosis 13, typhoid fever 6.

CANADA—*Hamilton*.—Month of October, 1912.—Population 85,000. Total number of deaths from all causes 138, including diphtheria 2, tuberculosis 5, typhoid fever 1.

FRANCE—*Calais*.—Month of October, 1912. Population 80,000. Total number of deaths from all causes 105, including tuberculosis 22, typhoid fever 1.

GERMAN EMPIRE—*Strassburg*.—Month of September, 1912. Population 182,426. Total number of deaths from all causes 207, including diphtheria 2, measles 2, tuberculosis 18.

GREAT BRITAIN.—Week ended October 19, 1912.

England and Wales.—The deaths registered in 95 great towns correspond to an annual rate of 14.2 per 1,000 of the population which is estimated at 17,639,881.

Ireland.—The deaths registered in 21 principal town districts correspond to an annual rate of 16.5 per 1,000 of the population which is estimated at 1,154,150. The lowest rate was recorded at Drogheda, viz, 4.2 and the highest at Limerick, viz, 35.2 per 1,000.

Scotland.—The deaths registered in 18 principal towns correspond to an annual rate of 13.6 per 1,000 of the population which is estimated at 2,182,400. The lowest rate was recorded at Kirkcaldy, viz, 6.5 and the highest at Dundee, viz, 18.9 per 1,000. The total number of deaths reported from all causes was 568 including diphtheria 11, measles 1, scarlet fever 2, typhoid fever 2.

ITALY—*Venice*.—Month of September, 1912. Population 160,727. Total number of deaths from all causes 246, including measles 2, scarlet fever 5, tuberculosis 35, typhoid fever 3.

SOUTH AFRICA—*Cape Town*.—Four weeks ended September 27, 1912. Population 67,922. Total number of deaths from all causes 112, including diphtheria 3, tuberculosis 17, typhoid fever 1.

SPAIN—*Almeria*.—Month of October, 1912. Population 53,000. Total number of deaths from all causes 108, including smallpox 19, tuberculosis 15, typhoid fever 1.

Huelva.—Month of September, 1912. Population 28,982. Total number of deaths from all causes 43, including tuberculosis 6.

Madrid.—Month of October, 1912. Population 591,598. Total number of deaths from all causes 1,069, including diphtheria 50, measles 6, scarlet fever 5, smallpox 17, tuberculosis 146, typhoid fever 11.

By authority of the Secretary of the Treasury.

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